

ROLE CONFLICT AND ROLE AMBIGUITY AS PREDICTORS OF
BURNOUT AMONG HOSPICE NURSES AND SOCIAL WORKERS

By
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The purpose of this study was to analyze whether perceived role ambiguity and role conflict are useful as predictors of burnout among hospice nurses and hospice social workers.

Subjects in this study were nurses and social workers (counselors) employed by hospices which were members of the National Hospice Organization and which were licensed by their respective states. The sample included 162 nurses and 72 social workers for a total sample size of 234. Survey packets were distributed to the subjects by their respective hospices since data did not exist which would allow subjects working for hospices to be contacted individually. The survey packets included a (a) letter of introduction and instruction, (b) demographic inventory, (c) Maslach Burnout Inventory, (d) Role Questionnaire to measure perceived role ambiguity and role conflict, and an (e) addressed,

stamped return envelope. The study was designed to ensure respondent anonymity.

Results were analyzed using analyses of variance and stepwise regression. The three subscales of the Maslach Burnout Inventory (a) Emotional Exhaustion, (b) Depersonalization, and (c) Personal Accomplishment were used as dependent variables. There were significant relationships between role conflict and between role ambiguity and each of the three subscales. Role conflict and role ambiguity influenced each subscale in opposite directions: (a) as role conflict went up, Emotional Exhaustion and Depersonalization went down; (b) as role ambiguity went up, Emotional Exhaustion and Depersonalization went up; (c) as role conflict went up Personal Accomplishment (reversed) went up; and (d) as role ambiguity went up Personal Accomplishment (reversed) went down. There were no significant findings based on subject gender, race, age, years worked. Data did indicate that subjects in the study were experiencing moderate levels of burnout.

It was concluded that role ambiguity and role conflict do contribute at a significant level to burnout for hospice nurses and social workers, but do not serve as strong predictor factors. Recommendations for addressing role ambiguity and role conflict for hospice nurses and social workers and recommendations for further study were provided.

CHAPTER I INTRODUCTION

There is no virtue in self-suffering, no redemption in insisting upon exhaustion and emotional poverty. Those who unwittingly follow such a course, believing that they are only being true to medical ideals, become their own adversaries. Vulnerability is a human quality, not a fatal disease. But burnout is the all too common end-stage when stress is not dealt with. (Weisman, in Vachon, 1987a, p. xii)

Job stress and the phenomenon frequently termed "burnout" in the helping professional have received increased attention over the last 15 years (Foxall, Zimmerman, Standley, & Bené, 1990; Golembiewski & Munzenrider, 1988; Koeske, Kirk, & Koeske, 1993; Kobasa, 1979). This increased attention has been particularly true of the health care professional. There has been growing recognition that job-related stress can have serious consequences for individuals and the organizations in which they work (Oktay, 1992; Wolfgang, 1988).

The consequences for the individual include anxiety, depression, illness, job dissatisfaction, and absence from work. Moreover, the consequences for the delivery of health care services which have adverse effects on providers as well as recipients of health care include recipients waiting longer to

receive less attention and care. Furthermore, the quality of the delivery of health services is poor. Stress has been noted as a key factor in the attrition rate for nurses and nursing students (Lees & Ellis, 1990), as well as playing a role in chronic tiredness and high rates of absenteeism (Albrecht, 1982; Jayaratne, Himle, & Chess, 1991; Stewart, Meyerowitz, Jackson, Yarkin, & Harvey, 1982).

Research findings related to job satisfaction and social workers (Farber, 1983; Poulin & Walter, 1993) link high stress with somatic complaints, depression and irritability. Kearns (1986) suggested that 60% of absence from work is caused by stress-related disorders. While it is difficult to accurately estimate the financial cost of stress to health care organizations, Cooper and Payne (1988) presented financial statistics indicating that American employers spend more than \$2 billion annually for just two of the top ten diseases related to stress, coronary artery disease and heart disease. Some estimates place the annual industry cost of stress at \$150 billion (Rosch & Pelletier, 1989). At its most extreme stage, stress can result in burnout.

Burnout has been conceptualized as a syndrome of emotional exhaustion brought about by unrelieved stress (Byrne, 1993; Stechmiller, 1990; Wolfgang, 1988). It is most often associated with individuals who do "people-work" of some kind (Maslach, 1982a). Burnout, in addition to the stress consequences mentioned above, has been found to contribute to (a) high job turnover, (b) depersonalization of recipients of care, and (c) increased mistakes in the delivery of care. Burnout also "correlates with other

damaging indexes of human stress, such as alcoholism and drug abuse, mental illness, marital conflict and suicide" (Maslach, 1982a, p. 75). In addition, burned out personnel, collectively, can burn out their organization. Certainly, burned out personnel at any level in an organization have a negative effect on the organization's total performance (Oktay, 1992; Simendinger & Moore, 1985). Characteristics of burned out organizations (those which have significant gaps between their performance and their potential) include (a) bickering between staff and between staff levels (often in the form of conflict); (b) stagnation in the way problems and opportunities are addressed, with a defensive posture to new and innovative ways of doing things; and (c) lack of vision, most clearly seen when the organization spends much time resolving crises rather than revising its mission, and reactive problem solving rather than proactive planning (Simendinger & Moore, 1985).

Overview

The concept of "burnout" originates from stress research. The term "stress" was first introduced into health sciences by Hans Selye in 1926 (Selye, 1956). Selye (1974) defined stress as the "non-specific response of the body to any demand made upon it" (p. 140). His concern was with the "strain" individuals experienced, the body's physiological reactions to various noxious environmental agents, or, more simply, "the rate of wear and tear in the body" (Selye, 1974, p. 141). Stress arousal is a response which represents a physiological reaction. "A vast literature

argues that when stress arousal becomes excessively chronic or excessively intense in amplitude, target-organ (the organ affected by the stress response) disease and/or dysfunction will result" (Everly, 1989, p. 9).

Stressors (events which activate the stress response by disrupting homeostasis within the organism) fall into one of two categories: (a) biogenic stressors and (b) psychosocial stressors. Biogenic stressors actually cause the elicitation of the stress response by virtue of their biochemical properties. Coffee, tea, amphetamines, and so forth, all possess inherent stimulant qualities that will induce a stress response regardless of an individual's interpretation of them. "Psychosocial stressors are either real or imagined environmental events that 'set the stage' for the elicitation of the stress response. They cannot directly 'cause' the stress response, but must work through cognitive appraisal mechanics" (Everly, 1989, p. 25). Stress can be observed at the physiological, psychological, and behavioral levels (Lazarus & Folkman, 1984).

It is widely acknowledged that stressors are present everywhere (Antonovsky, 1979; Koeske et al., 1993; Lazarus & Folkman, 1984). While research related to stress is well established, there is still no single definition for stress (Neufeld, 1989). Stress may be viewed as the strain that occurs when resources are not adequate to meet the demands made by stressors. Stressors typically identified in health care organizations are psychosocial and are divided into two categories,

(a) personal and (b) work environment. Personal stressors include (a) coping skills, (b) personality, (c) age, (d) work experience, (e) education, (f) social support, and (g) life events. Work environment stressors include (a) fiscal restraints, (b) lack of adequate staff, (c) communication problems with other staff and with health care recipients and their families, (d) social support in the work setting, (e) unrealistic expectations of the organization, and (f) communication problems with administration.

Research has focused on the individual differences in coping that make a difference in the adaptation to stress and the environmental factors involved in the stressor or resources for coping (Cherniss, 1980; Cooper & Payne, 1988; Koeske et al., 1993). This definition of stress emphasizes the relationship between systems "and the importance of the context in which phenomena occur" (Lazarus & Folkman, 1984, p. 17). This definition emphasizes that stress and burnout result from the transaction between individual worker needs; personal resources; and the demands, constraints, resources, and limitations within the work environment.

Long term exposure to stress at work can have serious consequences. Freudenberger (1974) first described burnout as a state of physical and emotional exhaustion resulting from conditions at work. Burnout was described by Edelwich and Brodsky (1980) as a "progressive loss of idealism, energy, purpose, and concern as a result of conditions of work" (p. 14). Although there are many definitions for the concept of burnout, there is

consensus that it involves a process in which (a) an individual's (and organization's) attitudes and behaviors change in negative ways in response to job strain, and (b) involves emotional and physical components (Byrne, 1993; Cherniss, 1980; Evans & Fischer, 1993; Freudenberger, 1974; Maslach, 1976). Burnout is characterized by the component of exhaustion as a loss of energy, a loss of trust and the development of apathy, with a loss of feeling, concern, and spirit. This results in a loss of ideals, an increase in irritability, a loss of self-esteem and the development of inappropriate attitudes toward clients and coworkers. Somatic complaints increase.

Further, burnout is generally conceptualized as occurring in phases. The phases of burnout have been described as a progression from depersonalization to a decreased sense of personal accomplishment, and ending with emotional exhaustion (Evans & Fischer, 1993; Golembiewski, Munzenrider, & Stevenson, 1986; Maslach, 1982a). It is a process "in which a previously committed [organization member] disengages from his or her work in response to stress and strain experienced in the job" (Cherniss, 1980, p. 18). Maslach and Jackson (1982) developed a model of burnout which builds on the three subdomains of depersonalization, personal accomplishment (reversed), and emotional exhaustion.

Golembiewski and Munzenrider (1988) extended Maslach's work to define phases of burnout in terms of eight possible high-versus-low combinations of scores on the three subdomains.

Research findings related to these phases indicate that a high level of emotional exhaustion is considered the most potent contributor to burnout, and depersonalization the least potent (Golembiewski & Munzenrider, 1988; Golembiewski et al., 1986).

Theoretical Framework

The concept of Person-Environment Fit is a useful way of approaching the interactive model of stress, particularly job stress. This model was used as a general theoretical framework for this study. The Person-Environment Fit model (also known as Person-Job fit) was derived from work done by French, Rogers, and Cobb (1974) at the Institute for Social Research of the University of Michigan. Much of the Person-Environment Fit research has occurred in the areas of organizational behavior and in industrial and organizational psychology (Ferris & Rowland, 1991; Jones, 1993). This model addresses both job satisfaction and occupational stress as a result of the interaction between people employed in a particular job and the environment in which they are employed. The model is presumed to be dynamic (Vachon, 1987b), thus, the fit between an individual and his or her work environment is not static and needs frequent reassessment.

The Person-Environment Fit model accounts for two kinds of fit between the individual and the environment: (a) the extent to which the person's skills and abilities match the demand and requirements of the job, and (b) the extent to which the job environment provides supplies to meet individual needs. The individual has certain marketable skills (education, experience,

expertise, etc.) which the organization wants or needs and will purchase from the individual; the individual, in exchange, seeks certain "supplies" (pay, fringe benefits, social involvement, opportunity to achieve, a sense of self-worth, etc.) which may be overt or covert demands made of the organization. In the Person-Environment Fit model job stress occurs "to the extent that it [the job] does not provide supplies to meet the individual's motives and to the extent that the ability of the individual falls below the demands of the job which are prerequisite to receiving supplies" (Harrison, 1979, p. 178).

An adaptation of Perlman and Hartman's (1982) model of burnout was used to conceptualize the Person-Environment Fit in relationship to burnout. Their model includes personal-psychological variables and organizational-work variables that have been empirically studied both individually and in combination for over ten years (French, Rogers, & Cobb, 1974; Golembiewski et al., 1986; Harrison, 1979; Poulin & Walter, 1993). In reference to personal-psychological variables, researchers have indicated that the major life events (i.e., divorce, death of a loved one, unemployment) are less important to psychological well-being than daily hassles (i.e., traffic, arguments, noise) and that daily hassles are less important than are the individual's appraisal and coping processes (Aldwin & Revenson, 1987; Kobasa, 1979, 1981; Lazarus & Folkman, 1984; Poulin & Walter, 1993). This is not to say that life events and daily hassles are not important categories of stressors, but rather to place their potential for negative impact

into a hierarchical perspective. Understanding an individual's perception about his or her work environment is, therefore, an important factor in addressing burnout.

Appraisal and coping processes involve the evaluative process of attaching meaning (threat, benign, or enhancement) to a situation or event and the subsequent behaviors (psychological and physical) to respond to the situation or event (problem-solving, ignoring, etc.). In addition, one's sense of one's coping ability has been shown to have an important influence on coping outcomes (Bandura, 1982; Cotton, 1990; Dewe, 1991). In general, people will not use, or will use poorly, those resources/strategies for coping they (a) do not understand; (b) do not believe they have the ability to use; or (c) believe to be inadequate [the strategy] for the situation even though the strategy, if used, would be effective.

Researchers investigating work environment variables have consistently identified three variables in the top ten stressors for human services personnel: (a) role ambiguity and role conflict, (b) team communication problems, and (c) personality and communication problems related to "problem" patients or families (Daily, 1990; Golembiewski et al., 1986; Simendinger & Moore, 1985; Vachon, 1987a). Role conflict and role ambiguity develop when a discrepancy exists between perceptions of management and customer demands, that is, role conflict is experienced "when the worker perceives management emphasizing system requirements at odds with client needs" (Cooper & Payne, 1988, p. 81). Role ambiguity is the opposite of clarity about what one is

supposed to do on a job, its purpose, and responsibilities (Holt, 1982). Campbell (1986) and others have shown that role conflict and role ambiguity lower job satisfaction, raise job tension, and contribute to employee turnover (Glisson & Durick, 1988; Sowell & Alexander, 1989). Role conflict and role ambiguity have been found to decrease one's involvement with work and an employing organization (Netemeyer, Johnston, & Burton, 1990). Given the fact that stress evolves through the interaction between an individual and the work environment, it is important to better understand variables related to burnout that address individuals and work environment factors and their interaction (Cooper & Payne, 1988).

The potential to experience role conflict and role ambiguity is great for hospice patient care staff, particularly nurses and social workers (Rusnack, Schaefer, Moxley, 1990; Stoddard, 1991; Vachon, 1987a). For hospices, the work environment includes team work between persons from differing professions. Social workers, nurses, chaplains, physicians, home health aides, and volunteers all serve as joint team members for a patient and contribute to a plan of care for each patient and family. The work environment also includes different settings: (a) hospitals, (b) nursing homes, and (c) patient homes. Much of what takes place for a patient in hospice care is medical in nature, i.e., pain medications, various palliative treatments, wound care, oxygen, etc. Much of the communication about a patient is medical, i.e., between physician and patient and nurse. Social workers, as an

important part of the team, must "find their way" in this predominately "medical" system to provide support and counseling, and to help locate community resources for the patient and family (Rusnack, Schaefer, & Moxley, 1990). Vachon (1987a, 1987b) has reported that social workers feel role ambiguity within such "medical" systems and may experience role conflict and role ambiguity in different ways than the nurses due to the difference in training and work role expectations. Vachon (1987a) has noted that social workers often feel that their work is not respected by medical team members (i.e., nurses, physicians, etc.). She has also noted (1987b) that hospice workers frequently experience role ambiguity when they are torn between the various groups with which they work, i.e., family requests/demands vs. physician orders and expectations vs. hospice standards and policies vs. facility (nursing home, hospital, etc.) personnel who may not agree with the hospice philosophy of palliative care.

Statement of the Problem

There is little empirical data regarding the specifics of burnout for hospice personnel as health care workers. Our society increasingly depends on highly trained professional personnel to deliver services through institutions (hospices, hospitals, schools, mental health organizations, etc.), and increasingly to provide these services in home settings to meet human needs formerly provided by family, church, neighborhood, and friends.

[Health care] professionals constitute one of the fastest growing and most important sections of American society. To a very great extent, the

welfare of society has come to depend on their work. For these reasons, the study of how professionals get to be the way they are is of great practical significance. (Cherniss, 1980, p. 3; Ferris & Rowland, 1991)

As the movement to study death and dying has grown over the past three decades, there has been increased awareness of the stress and strain on professionals working with dying patients and their families (Oktay, 1992; Vachon, 1987b). Three work environment conditions have been cited most frequently as high stressors for nurses: (a) workload, (b) role conflict, and (c) communication between staff members (Bene' & Foxall, 1991). This parallels awareness of the stress and burnout of the helping professional in other public services (schools, mental health organizations, hospitals, etc.).

Often, personal burnout occurs when people develop the feeling that they are beating their head against the wall day after day, year after year. Many idealists who want to do something for the world become physicians, nurses, lawyers, social workers, and counselors. They hope to improve the lives of those with whom they deal; they envision making people well and making their lives productive. Those in the helping professions see a great deal of failure and misery, however. (Simendinger & Moore, 1985, p. 52)

Those who work in hospice settings are exposed to many stressors. Although some of these stressors are inherent in the demands of working with dying patients and their families, most of the stressors of significance derive from occupational roles and the work setting. Not all helping professionals are equally

vulnerable to these environmental demands and, therefore, do not necessarily perceive them as stressors. Therefore, attention to delineating the individual worker's perceptions which are experienced as stressful and are potential causes of burnout is important (Cooper & Payne, 1988; Golembiewski et al., 1986; Stechmiller, 1990; Vachon, 1987a). Little attention has been given to work conditions which interact with a professional's perceptions of work stress.

Need for the Study

High levels of job stress and subsequent burnout for the helping professional have major personal, organizational, and social costs. As the personal and organizational costs of high stress become more clearly known through research (Minnehan & Paine, 1982; Poulin & Walter, 1993), employers and employees are seeking ways to limit job stress. Professionals in the helping professions must deal directly with people about issues that are, or could be, problematic and must coordinate directly with other helping professionals. Such settings have been shown (Maslach, 1976; Maslach & Jackson, 1986) to produce chronic emotional stress which is believed to induce burnout. Yet, there has been little emphasis placed on the similarities and/or differences of perceived job stress and levels of burnout between persons of differing disciplines working closely together. It is important to note that a person's coworkers' health, stress, and perceptions about work make up part of one's work environment, often a significant part.

Hospices are unique health care organizations. Part of certification requirements for hospices (Joint Commission on Accreditation of Hospitals, 1993) include providing employee support. If the factors influencing the Person-Environment Fit of hospice workers were better understood, there would be important implications for Employee Assistance Programs and the mandated programs for employee support in hospices. Professionals in health care settings, such as hospices, experience a number of stressors which derive from work related factors such as role ambiguity, role conflict, communication problems at work, and workload. Yet, there are few, if any, studies on role ambiguity and role conflict and burnout experienced by hospice workers. The goal of this study was to examine burnout among hospice social workers and hospice nurses using role ambiguity and role conflict as potential predictors for burnout.

Purpose of the Study

The purpose of this study was to analyze whether perceived role ambiguity and role conflict predict burnout among hospice nurses and hospice social workers. The Person-Environment Fit theory (French et al., 1974) was used as a conceptual framework for investigating role ambiguity and role conflict as potential predictors of employee burnout. Role ambiguity and role conflict have been identified in many studies as important factors in job stress and burnout. The instruments which were used in the study included the Rizzo, House, and Lirtzman's (1970) scales (the Role Questionnaire) for role ambiguity and role conflict, and the

Maslach Burnout Inventory (the Human Services Survey) to measure perceived burnout.

The Research Questions

1. Can role ambiguity and role conflict, as measured by the Role Questionnaire, predict burnout, as measured by the three Maslach Burnout Inventory subscales, among social workers and nurses working in hospice settings?
2. Do role conflict and role ambiguity in combination with type of work (social worker or nurse) predict burnout in hospice workers?
3. Do role conflict and role ambiguity in combination with type of work (social worker or nurse), race, gender, age, and work experience predict burnout in hospice workers?

Rationale for the Approach

The professional's perceptions about her or his own job stress as well as perceptions about coworker job stress are important indicators of burnout and are to date primary methods of burnout measurement (Cherniss, 1980; Golembiewski et al., 1986). Therefore, self-report instruments were chosen. The paper-and-pencil assessment instruments used in this project were chosen because they are the most widely used assessments for burnout and for role ambiguity and role conflict in the human resources field at this time; these instruments are also used for their self-report quality, low cost appeal for organizational use, ease in administration (short time required for completing and no special training needed to administrate), and ease of scoring. The

subjects for this study were a random sample of social workers and nurses who were currently employed by hospices which were, at the time of the study, current members of the National Hospice Organization (NHO) and which were licensed by their respective states.

Definition of Terms

A number of terms will be used throughout this study which in general use have several definitions and/or connotations or which are not in common, public use. It is, therefore, important to operationally define these terms as they are used in this study.

Appraisal is a cognitive process by which one assesses a stressor as to its potential (perceived) threat. Further, it is a complex evaluative process that takes into account which coping options (resources) are available, the potential the various options have to meet the coping need, and the likelihood that one can apply a particular option effectively (Lazarus & Folkman, 1984).

The autonomic nervous system is actually made up of two systems: (a) the sympathetic nervous system and the (b) parasympathetic nervous system. These two systems check and balance each other so the body can adjust to all types of situations and function effectively in time of stress. They regulate such body functions as breathing, beating of the heart, rate of glandular activity, and the contraction and dilation of the blood vessels.

Autonomy is associated with job control and "generally refers to the control a worker has over his or her own time and

activity" especially in relation to the pace of work (Vachon, 1987b, p. 85).

Burnout is a state of physical, emotional, and mental exhaustion marked by physical depletion and chronic fatigue, feelings of helplessness and hopelessness, and the development of a negative self-concept and negative attitudes toward work, life, and other people (Maslach, 1982a, p. 30).

Coping describes the constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person (Lazarus & Folkman, 1984, p. 141). Coping may be either positive or negative.

End-organ (or target-organ) refers to an actual organ or system in the body which may manifest dysfunction as a result of chronic stress reactivity. Examples of known stress-related dysfunction: cardiovascular disorders, particularly, hypertension; migraine headaches; Raynaud's syndrome; severe menstrual cramps; muscle spasm (skeletal muscle spasm may lead to end-organ pathophysiology which include diseases such as fibrosis, and several degenerative joint diseases); and dysfunction of the hypothalamus.

A helping professional is an individual with specialized training who works in human resources. Examples: teachers, social workers, nurses, counselors, clergy, administrators of health care facilities, etc.

A health care professional is an individual who works for a health care agency or institution and who provides specialized care related to one's physical and mental health.

Homeostasis refers to the normal internal environment of the body; a tendency toward stability in the normal body states. Four major organ systems are responsible for maintaining the homeostasis of the body: (a) respiratory, (b) digestive, (c) urinary, and (d) circulatory (Asterita, 1985).

Hospice is a medieval term, referring to wayside inns for pilgrims and other travelers, particularly at those places of greatest vulnerability and hardship. Antecedents for the hospice movement were evident as early as 238 B.C. "when religious pilgrims coming to the holy waters of the Ganges at Varanasi (Barnaras), in hopes of dying there so that their ashes could be spread upon the river, were given shelter with their families" (Davidson, 1985, pp. 1, 2). Today it represents an interdisciplinary team (social workers, nurses, spiritual leaders, volunteers, doctors, home health aides, etc.) approach to palliative care for terminally ill patients and their families and other caregivers.

Job stress, or occupational stress, represents some imbalance between the demands of work and the resources the worker can bring to bear. This imbalance may lead to physical, psychological, or behavioral manifestations of stress (Vachon, 1987b, p. 5).

Mediators are factors that serve as buffers to stress, or provide support or protection against life stressors. "Mediators help to explain why many people seem to experience many

potential stressors without having any apparent consequences while others react markedly and have many consequences" (Elliott & Eisdorfer, 1982, p. 22).

Palliative care focuses on treatment to relieve symptoms and pain without a goal or attempt to cure.

A pathogen is any substance capable of producing disease (Thomas, 1989).

Role ambiguity is the result of the discrepancy between perceptions of management and customer demands and the worker's (professional's) role expectations. It is most clearly seen when a worker perceives management emphasizing system requirements at odds with client needs and/or at odds with the worker's understanding of how to perform his or her role (Cooper & Payne, 1988, p. 81).

Role conflict occurs when inconsistent, incongruent, incompatible, or inappropriate demands are placed upon an individual such as: (a) when an individual's values and ethics conflict with those of his or her supervisor or supervisee, or (b) when an individual is told to do things that he or she perceives as outside the domain of their professional work (Farber, 1983, p. 6).

Self-efficacy "refers to personal judgments of how well one can implement patterns of behavior in situations that may contain novel, unpredictable, and stressful elements" (Bandura, 1981, in Schunk & Carboni, 1984, p. 231).

Social support may be (a) emotional, including reassurance, trust, attachment; (b) tangible, in the form of direct aid such as

gifts, loans, or services (such as assisting in a job, providing personal care for someone who is ill, driving someone someplace); or (c) informational, providing feedback, information or advice (Lazarus & Folkman, 1984, p. 250).

Support groups refer to organized groups for employees which meet during work hours and which have as their goal work related topics rather than personal growth per se. Support groups aim for "increased staff effectiveness through problem solving of work-related difficulties" and lowered stress for staff (Farber, 1983, p. 191).

Stressor refers to a demand (internal or external) that if not met and neutralized somehow, will result in harmful consequences to a person (Lazarus & Launier, 1978, p. 288).

Work role set includes those persons who hold the same job description and responsibilities within an organization.

Organization of the Remainder of the Study

The remainder of the study consists of four chapters. Chapter II presents a review and analysis of the relevant literature. Chapter III contains a description of the research questions and hypotheses, subjects, research instrumentation, research design, data collection and analysis, and limitations of the study. The results of the study are presented in Chapter IV. Chapter V concludes the study with a discussion of the results, conclusions, implications, and recommendations for future research.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

The review of literature presented in this chapter includes (a) an overview of the costs of chronic stress and burnout; (b) stress research and the development of the concept of burnout, including definitions of stress and burnout; (c) common causes of burnout in the human services; (d) work environment factors; (e) an overview of the Person-Environment Fit theory; and (f) support for role ambiguity and role conflict as important contributors to stress and burnout. Finally, a rationale for choosing hospice employees, specifically nurses and social workers, as the target population for this study is presented.

Chronic Stress and Burnout Costs

High levels of job stress and subsequent burnout of the helping professional have major personal, organizational, and social costs (Koeske, Kirk, & Koeske, 1993; Oktay, 1992). Researchers interested in job stress and burnout have explored (a) work environment stressors and (b) personal characteristics which contribute to burnout (Golembiewski, Munsenrider, & Stevenson, 1986; Koeske et al., 1993; Stechmiller, 1990; Vachon, 1987b). Much attention has been given to delineating personal characteristics and environmental factors which are

potential causes of burnout (Cherniss, 1980; Cooper & Payne, 1988; Jayaratne, Himle, & Chess, 1991; Maslach, 1976; Vachon, 1987b), but it has not been until recently that the interaction between person and environment has been studied as a source of burnout. The field of occupational stress

is not a new phenomenon, but it is a relatively new concept and field of study The two essential ingredients necessary for occupational stress to come into being as a subdiscipline were (a) the founding of the field of psychosomatic medicine by Dunbar and others and (b) the pioneering work of Selye on stress and the general adaptation syndrome as a fresh conceptualization of the nature of much illness. (Holt, 1992, p. 343)

With the rise of the movement to promote mental health, society has become generally aware of a new class of detrimental aspects of work, defined by their largely psychological effects (Holt, 1992). The study of occupational stress received increased recognition as an important field of research in 1970 by the establishment of the National Institute for Occupational Safety and Health (NIOSH) by Public Law 91-596, the Occupational Safety and Health Act of 1970 (OSHA). "From its beginning, NIOSH was directed to include psychological, behavioral, and motivational factors in the investigations it sponsored and carried out" (Cohen & Margolis, 1973, p. 242). Throughout its history, NIOSH research psychologists have examined the relationship between working conditions and health consequences and have noted that various job conditions can produce psychological, physiological, and behavioral reactions in workers.

The term "burnout" had not appeared in print before 1974 (Cherniss, 1980; Freudenberger, 1974). Since that time, the phenomenon has received increased attention in the area of personnel management in human services, particularly in the area of health care professionals (Cooper & Payne, 1988; Foxall, Zimmerman, Standley, & Bené, 1990). As job stress and burnout research findings accumulate, it becomes increasingly clear that the consequences of burnout are expensive to both individuals and to the organizations in which they work (Wolfgang, 1988). Chronic elicitation of the stress response is strongly linked to health impairment and disease (Asterita, 1985; Cassel, 1974; Murphy & Shoenborn, 1989; Pines & Aronson, 1988).

The "price tag" for burnout includes (a) direct, (b) indirect, and (c) hidden costs. Direct costs, those which are shared by the employee, employer, and insurer, are frequently defined in terms of illness or absenteeism and include the value of resources used to provide (a) prevention, (b) diagnosis, (c) treatment, (d) continuing care and (e) rehabilitation of the health impairment (Paine, 1982). Rosch and Pelletier (1989) estimated that American employers spend more than \$150 billion annually, more than the combined profits of the Fortune 500 companies for 1989 (Pelletier & Lutz, 1990), as assessed by absenteeism; diminished productivity; compensation claims; health insurance; and direct medical expenses. It is estimated that an average of one million workers are absent on any given workday due to stress-related disorders (Manuso, 1984; Murphy & Shoenborn, 1989).

Greenwood and Greenwood (1979) found the direct costs of stress to be in excess of \$19 billion per year, while Manuso (1984) found that the additional cost of employing a worker with stress-related symptoms can be an additional 25% of that employee's salary.

The following list illustrates part of the broad spectrum of diseases linked to stress, even in the absence of commonly known risk factors:

coronary artery disease	major heart disease
asthma	some forms of cancer
diabetes	ulcers
arthritis	colitis
dysmenorrhea	migraine headaches
fibrosis	Raynaud's syndrome
immune system deficiencies	skin disorders
overeating/undereating	substance abuse.
(Asterita, 1985; Friedman & DiMatteo, 1989; Taylor, 1986)	

Indirect costs of burnout are most evident in productivity losses (Cooper & Payne, 1988; Wolfgang, 1988; Wolpin, Burke, & Greenglass, 1991). Symptoms of burnout in the individual which reduce productivity include depression, anxiety, fatigue, job dissatisfaction, and illness. In addition, stress contributes to absenteeism and high rates of job turnover (Albrecht, 1982; Cooper & Payne, 1988). It is estimated that 60% of absence from work is caused by stress-related disorders (Kearns, 1986). In a predictive study of qualified nursing staff in long-stay settings, Firth and Britton (1989) found emotional exhaustion (a component of burnout) predicted the frequency of absences of more than seven days and that feelings of depersonalization (a component of

burnout) were correlated with departure from the job (15% of nursing staff) during the subsequent two years.

The human costs, losses in (a) enthusiasm; (b) commitment; and (c) creativity, are difficult to measure. There are, however, cost analysis methods available to measure the financial cost to organizations for overtime to coworkers, coworker productivity loss due to added stress, orientation and training costs for replacement employees, insurance premiums, and payments for early retirement. Cooper and Payne (1988) presented financial statistics indicating that over \$150 billion are spent annually in the United States for stress related medical problems.

The hidden costs of burnout are the effects borne by family and related persons and clients. Burnout correlates with damaging indexes of human stress such as (a) family and marital conflict, (b) mental illness, (c) suicide, and (d) drug abuse (Koeske et al., 1993; Maslach, 1976). Recipients of health care from helping professionals suffering burnout wait longer to receive less attention, less care, and poorer quality health care services. This translates into the depersonalization of the recipients of care and increased mistakes in the delivery of care (Simendinger & Moore, 1985).

Burned out personnel can collectively burn out their organization:

[Organizational] burnout can occur when (1) an organization's leaders burn out, (2) its non-supervisory employees burn out, or (3) neither the leaders nor the employees burn out, but there is a systems or 'circuit' failure--

usually related to ineffective communication or the lack of clearly defined organizational goals accepted by the employees. (Simendinger & Moore, 1985, p. 45)

Burned out organizations have significant gaps between their performance and their potential (Golembiewski et al., 1986). Organization burnout is, however, not synonymous with organization failure. Simendinger and Moore (1985) noted that symptoms of burned out organizations include (a) bickering, between peers and between staff levels (often experienced as conflict); (b) stagnation of problem solving techniques; (c) lack of vision, most clearly seen where the organization focuses on resolving crises (often minor) and spends little time in proactive planning; and (d) a sense of resignation by management or employees where they feel as though they are waiting for a broken red light to change. These symptoms create a spiral of burnout between the organization and employees (Cherniss, 1980).

Stress and Burnout

The concept of burnout is an extension of stress research, occupational stress research in particular. Used as early as the 14th century to connote affliction, hardships, or adversity, systematic or scientific usage of the term stress was not made until the early 19th century (Lazarus & Folkman, 1984) at which time the concepts of stress and strain were conceived as a basis of ill health. The work of Hans Selye during the 1930s, 1940s, and 1950s played a dominant role in the development of the scientific concept of stress. Building on the work of W. B. Cannon's (1932)

observation of the 'fight or flight' physiological reactions to threat, Selye understood stress to be a universal physiological set of reactions and processes, which he called the General Adaptation Syndrome (GAS), created by an environmental demand. Stress was, for Selye, an orchestrated set of bodily defenses against an environmental demand, including psychological threats (Selye, 1956).

The General Adaptation Syndrome is a response to stress which involves a process made up of three stages: (a) alarm, (b) resistance, and (c) exhaustion. The alarm stage represents a generalized somatic shock in response to some stressor. The alarm stage is basically characterized by the release of multiple hormones into the bloodstream activating the sympathetic response best known as the body's defense mechanism of 'fight or flight.' The resistance stage seeks a dramatic reduction in most alarm stage processes as the body fights to reestablish and maintain homeostasis. During this stage another set of hormones are released, particularly cortisol, resulting in the body functioning at heightened levels. The alarm and resistance stages can be repeated time and again throughout one's life. The exhaustion stage represents a breakdown in one's ability to recover from the stress reactions. The exhaustion stage involves increased endocrine activity with high circulating levels of cortisol which begin to produce pronounced effects "on the circulatory, digestive, immune, and other systems of the body. Shock, ulcers, and lowered resistance to infection may begin to appear as the

adaptation can no longer prevail . . . in many cases, this experience can prove lethal to the organism" (Asterita, 1985, p. 43).

The pathways activated by the stress response are the neural and neuroendocrine systems. As the autonomic nervous system is activated by the stress response, one of the immediate effects is overall body arousal. As the resistance stage develops, parasympathetic activation begins to again seek homeostasis by producing the opposite effects of the sympathetic activation (Asterita, 1985). "In terms of the reactions which occur in the body, the stress response itself is comprised of over 1,400 physiochemical changes" (Asterita, 1985, p. 36). If the stress response is sufficiently severe and/or prolonged, the development of a disease or stress-related disorder (specific end-organ dysfunction) results from persistent hyperarousal or over stimulation (Asterita, 1985; Everly, 1989).

Exhaustion, the third and final stage of GAS, occurs with extreme or severally prolonged stress response activity without relief. Exhaustion of the person results in death (Asterita, 1985; Selye, 1956). Although it is not clear exactly how these systems are activated by stress and how different persons display different target organ vulnerabilities, research is clear that stress affects the immune system and, when severe or prolonged, stress plays some role in illness development and progression (Cotton, 1990). Stress, whether the stressor is environmental or internal (psychological), is without doubt a physiological event that affects health.

Besides medicine, other life sciences have developed the stress concept. Sociologist Durkheim wrote about "alienation" as a condition of "anomie that arises when people experience the lack or loss of acceptable norms to guide their efforts to achieve socially prescribed goals" (cited in Lazarus & Folkman, 1984, p. 4). A sense of powerlessness, meaninglessness, normlessness, isolation, and self-estrangement by an individual or group are variants of the concept of alienation and have been placed under the general rubric of stress (Lazarus & Folkman, 1984). Psychosocial stressors are considered in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 1994) for their severity and precipitating role in a mental disorder.

In the field of individual psychology, stress was for a long time implicit as an organizing framework for thinking about anxiety. It was not until 1944 that the term stress appeared in the index of Psychological Abstracts. Freud, for instance, held that conflict-induced anxiety signaled danger and triggered defense mechanisms, which were unsatisfactory modes of coping.

If one recognizes that there is a heavy overlap between the concepts of anxiety and stress, and does not feel it necessary to quibble about which term is used, it could be said that the dominant view of psychopathology thus formulated was that it was a product of stress. (Lazarus & Folkman, 1984, p. 5)

Definitions of Stress

While stress is now a common term in society, and research findings and methodologies are well established, there is still no

agreement on a definition of stress (Neufeld, 1989). Stress, like many scientific terms that find their way into the dictionary, has taken on a variety of meanings. One of the most common definitions of stress is that it is a stimulus (Asterita, 1985).

Viewed as a stimulus, any experience which a person perceives as a strain on her or his resources may be termed a stressor. Such strains may be physical, psychological, or psychosocial in nature. Using the stimulus definition, stressors could include illness, self-doubt, financial difficulties, etc. Another popular definition is that stress is a response. Used most often in biology and medicine, this definition emphasizes a "state of stress" which can be identified by physiological and psychological responses to situations (Selye, 1976). Heart rate, perspiration, hormonal changes are some of the physiological responses noted (Asterita, 1985). Psychological responses include anxiety, fear, confusion, and depression.

A third definition which is receiving increased attention is that stress is defined by the stimulus-response relationship (Antonovsky, 1979; Lazarus & Folkman, 1984; Pollock, 1989). This definition of stress emphasizes the relationship between systems "and the importance of the context in which phenomena occur" (Lazarus & Folkman, 1984, p. 17). This approach focuses on coping strategies, specifically appraisal and coping as a new way to understand stress for the individual. This definition of stress and coping parallels modern medicine's concept of illness in which illness is no longer seen as simply the result of external organisms. Rather, it is now understood that a pathogen must be

united with an organism vulnerable to that pathogen before an illness may develop. This transactional understanding of stress takes into consideration the person-environment relationship and the characteristics of that relationship that may make one vulnerable to the development of stress. While it is true that extreme environmental conditions, such as natural disasters, loss of a loved one, or torture, may be shown to be stressful for most people, research literature asserts that the major life events (i.e., divorce, death of a loved one, unemployment) and daily hassles (i.e., traffic, arguments, noise) are less important to psychological well-being than are the individual's appraisal and coping processes (Aldwin & Revenson, 1987; Dewe, 1991; Kobasa, 1979, 1981; Lazarus & Folkman, 1984). Life events and daily hassles are important contributors to stress. However, their potential for negative impact on an individual must be placed into a relative hierarchical perspective with appraisal and coping processes as the umbrella influence, daily hassles, being the next most potent and life events having the least overall impact, remembering that "least overall" does not mean "lack of significant impact" (Cotton, 1990; Caplan, 1983). It is important to remember that there is a growing research literature which points to the conclusion that from the psychophysiological perspective, there is no such thing as a completely stress free life; everyone at some time experiences stress, regardless of their coping abilities (Koeske et al., 1993).

Appraisal and Coping As Part of the Stress Response

Appraisal is largely an evaluative process whereby people judge the seriousness, or the significance for well-being, of demands made upon them and the adequacy of their resources for coping with those demands (Dewe, 1991; Lazarus & Folkman, 1984). Lazarus and Folkman (1984) gave two reasons for the necessity of a concept of cognitive appraisal in stress theory. First, it seems evident that there is a "psychological situation" which is a product of the interplay between environment and person factors in any given stress situation. This is seen in the ways individuals and groups differ in their sensitivity and vulnerability to certain types of events, as well as in their interpretation of and reactions to those events (Ganellan & Blaney, 1984; Koeske et al., 1993). Under similar conditions one person may respond with anger, another with depression, another with enthusiasm and feeling challenged, and still another may feel threatened. Second, in order to survive and flourish people must distinguish between benign and dangerous situations. These distinctions are often subtle, complex, and abstract and depend on cognitive appraisal of situations and resources (Dewe, 1991).

Appraisal can be primary or secondary. Primary appraisal "sizes up" the situation and can be distinguished as one of three kinds: (a) irrelevant, (b) benign-positive, and (c) stressful (Dewe, 1991; Lazarus & Folkman, 1984). Appraisal which connotes a situation (external or internal) to carry no implication for a person's well-being (nothing can be lost or gained) is considered

irrelevant. Benign-positive appraisals occur if a situation preserves or enhances a person's well-being without presenting some degree of apprehension. Appraisals which include a sense of harm/loss, threat, or challenge are considered stress producing appraisals. "In their transactional perspective, loss, threat, and challenge are characteristics of the relationship between individual and environment" (McCrae, 1984, p. 920).

When the process of primary appraisal determines something to be stress producing, then secondary appraisal is activated (Dewe, 1991). This appraisal is a complex evaluative process that takes into account which coping options are available, the potential for the various options have to meet the coping need, and the likelihood that one can apply a particular option effectively. Responses can be appraisal-focused coping, problem-focused coping or emotion-focused coping. Appraisal-focused coping involves attempts to define the meaning of a situation (threat, benign-positive, neutral). "Problem-focused coping seeks to modify or eliminate the source of stress, to deal with the tangible consequences of a problem, . . . or actively to change the self and develop a more satisfying situation" (Moos & Billing, 1982, p. 218). Emotion-focused coping includes responses whose primary function is to manage the emotions aroused by stressors. These categories or domains are not mutually exclusive. "Appraisal-focused coping can be directed at either the stressors or the affective aspects of a situation or both" (Moos & Billing, 1982, p. 218). Problem-focused coping can assist one in dealing

with the emotions, while emotion-focused coping can provide needed resources to handle a problem. Whether primary or secondary, this model of appraisal is phenomenological, meaning that it rests on the individual's subjective interpretation of a transaction (Lazarus & Folkman, 1984).

Burnout

The term "burnout" was first used in 1974 by Freudenberger to describe a pattern of unfavorable behaviors and attitudes among helping professionals. "He identified a helping professional experiencing burnout as one who becomes exhausted from excessive demands on strength, energy, or resources or who is worn out" (Stechmiller, 1990, p. 16). Burnout is generally not associated with one or two traumatic events, but rather is insidious in that it sneaks up through a general erosion of the spirit. Definitions of burnout vary, but reveal shared components. Maslach (1982b) reported the following definitions of burnout:

- a) A syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who do people-work of some kind.
- b) A progressive loss of idealism, energy, and purpose experienced by people in the helping professions as a result of the conditions of their work.
- c) A state of physical, emotional, and mental exhaustion marked by physical depletion and chronic fatigue, feelings of helplessness and hopelessness, and the development of a negative self-concept and negative attitudes toward work, life, and other people.

d) A syndrome of inappropriate attitudes toward clients and self, often associated with uncomfortable physical and emotional symptoms.

e) A state of exhaustion, irritability, and fatigue that markedly decreases the worker's effectiveness and capability.

f) To deplete oneself. To exhaust one's physical and mental resources. To wear oneself out by excessively striving to reach some unrealistic expectations imposed by oneself or by the values of society.

g) To wear oneself out doing what one has to do. An inability to cope adequately with the stresses of work or personal life.

h) A malaise of the spirit. A loss of will. An inability to mobilize interests and capabilities.

i) To become debilitated, weakened, because of extreme demands on one's physical and/or mental energy.

j) An accumulation of intense negative feelings that is so debilitating that a person withdraws from the situation in which those feelings are generated.

k) A pervasive mood of anxiety giving way to depression and despair.

l) A process in which a professional's attitudes and behavior change in negative ways in response to job strain.

m) An inadequate coping mechanism used consistently by an individual to reduce stress.

n) A condition produced by working too hard for too long in a high-pressure environment.

o) A debilitating psychological condition resulting from work related frustrations, which results in lower employee productivity and morale.
(pp. 30-31)

The similarities among these definitions of burnout reveal a working definition of burnout. Burnout for the individual (a) occurs at an individual level, (b) is an internal psychological experience affecting feelings, attitudes, and expectations, and (c) is a negative experience for the individual. In addition, Maslach (1982a) pointed out three components about which most researchers agree: (a) exhaustion is experienced by the individual as a loss of energy, physiologically and psychologically, with a loss of trust and a growing experience of apathy; (b) the individual develops a disparaging response to others, with depersonalization, inappropriate attitudes toward patients/clients, irritability, and a loss of ideals; and (c) the individual develops lowered self-esteem, depression, withdrawal, low morale, lowered productivity, and a decrease in effective coping.

Further, burnout is generally associated with idealistic and enthusiastic individuals who work in the helping professions, people who work with people.

We have found, over and over again, that in order to burn out a person needs to have been on fire at one time. It follows, then, that one of the great costs of burnout is the diminution of the effective service of the very best people in a given profession. Accordingly, everyone is the poorer for the existence of this phenomenon. (Pines, Aronson, & Kafry, 1981, p. 4)

Five problems have been identified in professional training programs which contribute to the development of burnout: (a) unrealistic expectations of self and organization are created; (b) training is often not practical, thorough, or relevant enough; (c)

professionals are not trained in interpersonal skills to a sufficient degree; and (d) training does not provide adequate knowledge of the nature of bureaucratic organizations and how one can function effectively within those constraints; and (e) professionals are not adequately trained on how to cope with conflict, stress, and change (Cherniss, 1980; Koeske et al., 1993; Pines et al., 1981). Wilder and Plutchik (1982) reviewed data from pre-stress training programs and concluded that it may not be possible to help individuals cope with stress on a job until they are actually on the job: "how far can one help to prepare another person for an experience [he or she] has not had?" (p. 114). Further, the effectiveness of any pre-job stress training will be enhanced by continuing such a program when the individual is actually on the job (Wilder & Plutchik, 1982).

Common Causes of Burnout In the Human Services

Modern industrial society has grown increasingly dependent on human service professionals to provide services traditionally met by the extended family or the community (Cherniss, 1980; Evans & Fischer, 1993). The millions of professionals who perform human services share three basic characteristics:

- (1) they perform emotionally taxing work;
- (2) they share certain personality characteristics that made them choose human service as a career; and (3) they share a "client-centered" orientation. These three characteristics are the classic antecedents of burnout. (Pines & Aronson, 1988, pp. 83-84)

Human service professionals work with people in emotionally demanding situations over long periods of time. They are exposed to their client's psychological, social, and physical problems and "are expected to be both skilled and personally concerned" (Pines & Aronson, 1988, p. 84). The flow of emotional supplies tends to go only one way--from the worker to the client and may lead to the emotional depletion in the worker.

Inadequate training and/or education needed to do the job can also contribute to burnout. Continually confronted with challenges and problems with which they are ill equipped to cope, they experience personal and professional failure on the job, which contributes to a negative self-concept. One of the dynamics associated with a negative self-concept is the inability or refusal to seek assistance from others:

As the demands of the job increase and stress mount, this worker, fearing that his or her hidden inadequacies will soon surface for every one to see and ridicule, has only one option: to redouble his or her already overextended efforts to get the job done. More often than not, this last-gasp effort will fail, leaving the worker with but one thing to do, namely, burn out. (Carroll & White, 1982, p. 50)

Work Environment Factors

In her study of staff stress, Vachon (1987b) analyzed 3,101 environmental stressors identified by staff caring for the critically ill and the dying and reported the following distribution: (a) illness variables (15%), (b) patient/family variables (23%), (c) occupational role (26%), and (d) work environment--physical

(36%). "It seemed clear that [staff] felt that more of their stressors emerged from their work environment and from their occupational role than from their direct work with dying patients and their families" (Vachon, 1987b, p. 51). Yancik (1984) noted that over 50% of the stressful situations experienced by hospice nurses related to work environment and 37% of the stressful situations related to emotional concern for patients and families. Variables which have consistently been identified as key stressors for human services personnel who work in organizations which utilize interdisciplinary teams are: (a) role ambiguity and role conflict, (b) communication problems, and (c) personality and communication problems related to "problem" patients or families (Daily, 1990; Golembiewski et al., 1986; Simendinger & Moore, 1985; Vachon, 1987b). Studies on stress and social workers have identified three variables as consistently being the best predictors of burnout (inverse relationships) (a) belonging to a support group, (b) age, and (c) autonomy (Himle, Jayaratne, & Thyness, 1989; Jayaratne, Himle, & Chess, 1991; Koeske & Koeske, 1989). Support group participation has been found to help with role clarity and development of coping strategies (Vachon, 1987a). In a study of work-related stress, Weiman (1977) sought to discover major generic stressors. He found four such generic factors in his study of over 1,500 management-level employees (a) job role ambiguity; (b) job role conflict; (c) too much, or too little, work; and (d) too much, or too little, responsibility. Older workers experience less burnout than younger workers, but not due to

greater experience, but perhaps due to better coping skills and less outside responsibilities, such as young children. Pines and Aronson (1988) studied burnout as related to the number of hours worked and found that "it is not the number of hours per se that has the most impact on staff but the number of hours in direct contact with service recipients" (p. 190).

Team communication problems, which accounted for 17% of work environment stress in Vachon's (1987b) study, can result from a lack of team stability, intragroup conflict, and intergroup conflict. Lack of team stability can be a contributor to communication problems when there is rapid turnover of team members. The deletion or addition of any member essentially means that the team as it existed no longer exists (Vachon, 1987b). Further, team members may not know one another well enough to acknowledge or recognize each other's areas of expertise. Intragroup conflict can be experienced as rivalry and refusal to cooperate with one another; particularly when a peer is placed in a temporary position of authority over others (Vachon, 1987a). Vachon (1987a) notes that this type of conflict is "most apt to develop when team members have not had the time to get to know one another and come to trust one another's professional judgments" (p. 55). Lack of team cohesion can contribute to lack of support for developing role clarity and resolving role conflict, particularly when a team is comprised of professionals from different disciplines.

Fry, Lech, and Rubin (1974) have stated that in any group members need to develop ways of achieving goals and that from such there are questions concerning "(a) the extent to which such expectations are clearly defined and communicated (role ambiguity); (b) the extent to which such expectations are compatible or in conflict (role conflict); and (c) the extent to which any individual is capable of meeting the multiple expectations (role overload)" (p. 35). Vachon's (1987b) study found that caregivers surveyed reported similar findings: three out of the four top stressors cited were role ambiguity, role conflict, and role overload.

Person-Environment Fit Model

Person-Environment (PE) Fit theory is concerned with how characteristics of the environment and person affect well-being. It is an approach to stress that has become widely accepted among organizational stress researchers (Edward & Harrison, 1993; Eulberg, Weekley, & Bhagat, 1988). Developed by French, Rogers, and Cobb (1974) at the Institute for Social Research of the University of Michigan, this model addresses job satisfaction and occupational stress as a result of the interaction between people employed in a particular job and the environment in which they are employed. Two types of fit are distinguished in the theory: (a) needs-supplies fit and (b) abilities-demands fit. The needs-supplies fit involves the needs and values of the person with the environmental supplies and opportunities to meet those needs and values. The needs-supplies fit will include pay, fringe

benefits, social involvement, opportunity to achieve, etc. The abilities-demands fit addresses the marketable skills of the individual which the organization wants or needs and will purchase from the individual. "For example, work environments vary in the amount of quantitative work load they impose, and employees vary in their ability to handle that work load" (Caplan, 1983, p. 36).

"Different points of view can influence whether PE fit is defined as needs-supplies misfit or demands-abilities misfit. The employee may choose to define fit in terms of occupational self-fulfillment; the employer may choose to define the employee's fit in terms of abilities to meet the environment's demands" (Caplan, 1983, p. 36). Further, a distinction may be made in the PE fit model between the objective and subjective components of fit. In theory one can measure P and E free of bias introduced by the person (objectively) as well as subjectively (inclusive of that bias). Human perceptions of stressors do serve as intervening variables between objective stressors and the strains they produce as suggested by studies of commensurate objective and subjective stressors such as role conflict and work load (French & Caplan, 1972). Chatman (1989) has suggested that when studying subjective stressors, to choose those which have similarity in meaning at the individual and organizational level. Vancouver and Schmitt (1991), followed Chatman's recommendation in their review of supervisor-subordinate goal congruence in regard to role expectations for the subordinate. They found that "member-

constituency congruence (i.e., peer agreement) has a greater impact on job attitudes than did supervisor-subordinate congruence" (Vancouver & Schmitt, 1991, p. 348). Thus, Vancouver and Schmitt (1991) point out that the subjective appraisal of fit related to role stress had a greater impact on the individual's job attitudes than did the objective appraisal of fit between supervisor and subordinate.

Role Conflict and Role Ambiguity

Role ambiguity and role conflict and their effects on a number of job-related attitudes and behaviors have been studied extensively. "The meta-analyses of Fisher and Gitelson (1983) and Jackson and Schuler (1985) suggested that the impact of role conflict and role ambiguity on job-related attitudes and behaviors is pervasive" (Netemeyer, Johnston, & Burton, 1990, p. 148). The meta-analysis of 46 studies by Jackson and Schuler (1985) found that workers who experienced role ambiguity experienced low self-confidence, higher job-related tension, and lower job satisfaction, and an increased propensity to leave an organization. Their study also suggested that the role stressors are related to absence and poor job performance. Firth and Britton (1989) found an interesting relationship "between short-term absence spells (1-3 days) and high scores on one aspect of role ambiguity, in answer to the question: 'How clear are you about the limits of your authority in your present position?'" (p. 58). Role ambiguity and role conflict have also been shown to be related to physiological responses such as higher heart rate and blood

pressure (Ivancevich, Matteson, & Preston, 1982; Murphy & Shoenborn, 1989).

Fry, Lech, and Rubin (1974) found that group members (on a work team) need to develop ways of achieving goals and that in any group there are questions concerning (a) the extent to which such expectations are clearly defined and communicated (role ambiguity); and (b) the extent to which such expectations are compatible or in conflict (role conflict). Vachon (1987b) noted similar findings "in that three out of the four top stressors cited were role ambiguity, role conflict, and role overload" (p. 77). Several researchers have demonstrated that role conflict and role ambiguity are consistently correlated with each other (Burk, 1988; Jackson & Schuler, 1985).

Role ambiguity occurs when there is a lack of clear, consistent information about what is expected of a person in a role, or when an individual does not understand what others expect of her/him in that role. To adequately perform in one's role, each member of an organization must understand the expectations that others have of the role, rights, duties, and responsibilities of the role and what activities on the individual's part will fulfill these responsibilities (French, 1973; Jones, 1993; Kahn, Wolfe, Quinn, & Snoek, 1981; Vachon, 1987b). Vachon (1987b) found that role ambiguity was greatest among social workers and clergy and was the major role stressor in palliative care, pediatric chronic care and intensive care units.

Social workers frequently felt that nurses were defining their role in such a way as to overlap

with the role that social workers felt belonged to them. This was particularly a problem between social workers and either clinical nurse specialists or primary care nurses. (Vachon, 1987b, p. 77)

Abramson (1993) studied social work employees in interdisciplinary settings and found that "role definition for social workers in multidisciplinary settings is a constant struggle. Educating other professionals about the role repertoire of social workers requires vigilance and assertiveness" (p. 156). Studies on those working in palliative care (Mount & Voyer, 1980; Vachon, 1987b), report nurses and social workers experiencing significant stress from the fact that their role among the various health care professionals involved with a patient was not clearly defined. "Frequently the hospice team was accorded a token role but did not really have the power to influence the care that the patient received" (Vachon, 1987b, p. 78).

Role conflict occurs when inconsistent, incongruent, incompatible, or inappropriate demands are placed upon an individual such as: (a) when an individual's values and ethics conflict with those of his or her supervisor or supervisee, or (b) when an individual is told to do things that he or she perceives as outside the domain of their professional work (Farber, 1983; Frew, 1977; Jones, 1993). Role conflict may also develop as a result of caregivers operating in roles in which there is more than one group of people who have expectations of how they should perform. An example of such is when a hospice nurse is expected

to advocate for patient, and at the same time is expected to be a team player with the patient's doctor.

Kahn has found that "persons subjected to high role conflict report greater job-related tensions, lower job satisfaction, less confidence in the organization itself, and more intense experiences of conflict" (Kahn, 1973, p. 5). Vachon (1987b) found that role conflict was the major stressor for nurses, and the second greatest stressor for social workers. Both of these professional groups in her study frequently found themselves in a variety of role conflict situations indicating that the frequency of role conflict situations generated as much if not more stress than the intensity of situations (Vachon, 1987b).

Vachon (1987b) gives examples of role conflict through interviews. One example was with an obstetrics and gynecology nurse-coordinator:

When the doctor "gets it all" with cancer surgery, they are so proud of themselves and spend lots of time with the patient who feel that they're like a god. When he can't get it all though he gets out of the room as soon as possible and the nurse is left holding the bag. She knows that the patient hasn't been told what's really going on, and she feels torn between loyalty to the doctor and feeling that the patient should know. (Vachon, 1987b, pp. 82-83)

Another example illustrated the role conflict experienced by a social worker whose physician colleague resolved his role conflicts in a manner that in turn created role conflicts for her:

The chief of my service . . . feels that he should always be able to . . . call and tell you to be there . . .

whenever he wants you to be there. It's not at all unusual for me to get a message from his secretary saying that a certain patient is coming in at noon on Saturday and Dr. Jones wants you there. . . .

Furthermore, [he] never shows up himself. . . .

He really seems to expect us to sacrifice everything because his patients are dying. I have to ask myself what kind of message we're giving parents when we overextend ourselves like this.

Do we give them the message that they too should be constantly overextending? (Vachon, 1987b, p. 83)

In addition to generating increased stress for the person experiencing it, role conflict is also associated with poor interpersonal relationships. Those who experience high role conflict are more apt to report that "they have less trust in members of their role set, respect them less, like them less, and communicate with them less and develop lower self-esteem themselves" (Vachon, 1987b, p. 80). Yancik (1984) found in her study of coping among hospice workers, self-esteem is an important psychological resource that buffers the impact of workplace stressors. Thus, loss of self-esteem via a workplace stressor becomes an important factor in the development of stress and burnout (Wolpin et al., 1991).

Hospice

In 1967 Cicely Saunders established the first modern day hospice in St. Christopher's hospital in a residential suburb of London to provide specialized palliative care for dying patients (Davidson, 1985). The term hospice is a medieval one referring to wayside inns for pilgrims traveling to the holy waters of the Ganges at Varanasi (Barnarus), in hopes of dying there so that

their ashes could be spread upon the river. The hospice movement came to the United States in 1974 in New Haven, now known as Connecticut Hospice, Inc. The National Hospice Organization (NHO), a national hospice clearing house and advocacy center which was formed in 1977 (Hayslip & Leon, 1992), estimated that in 1993 there were over 1,900 hospices in the United States. Hospice accreditation is conducted by the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO). The JCAHO reported that of the 1,700 hospice programs listed in the 1990 NHO directory, approximately 26% had JCAHO accreditation (Coleman, 1990; Hayslip & Leon, 1992).

"Perhaps the most complex of regulatory processes to which hospice organizations are subject is the comprehensive health planning/certificate of need requirement" (Hamilton & Reid, 1980 p. 175; Coleman, 1990). Under Public Law 93-641 of 1974, the Comprehensive Health Planning and Resources Development Act, every state and locale must review the necessity of additions to the health care delivery system. As a result of Public Law 93-641, states are charged with reducing health expenditures by eliminating unnecessary or duplicative service. Health care providers apply for a certificate of need based on costs, necessity of their service, etc. Hospices apply in part based on the percentage of a state's cancer deaths they serve which varies from state to state but is generally above fifty percent of a state's cancer deaths and often as high as sixty to eighty percent (Coleman, 1990, Hayslip & Leon, 1992). The NHO reported in

1988 that about 190,000 people were served by hospice programs, with the number growing each year (Coleman, 1990). Typically eighty five to ninety five percent of hospice patients are suffering from cancer (Coleman, 1990; Hamilton & Reid, 1980; Hayslip & Leon, 1992).

Hospice organizations in the United States vary widely. Hospice programs are based in hospitals, nursing homes, home health care agencies or in independent organizations which provide only hospice care (Coleman, 1990). All hospices seek to achieve similar patient care goals and do so through the provision of similar program elements (Hayslip & Leon, 1992). The components of the hospice philosophy of care are reflected through these shared patient care goals:

Goals include pain and symptom relief, psychosocial support to patients and their families during the death process and supportive counseling to the survivors, patient and family instruction regarding death and dying and instruction to caregivers regarding care of the dying, and the coordination of needed service throughout the period of care. (Hayslip & Leon, 1992, p. 28; Coleman, 1990)

In the United States, the hospice model is home-based. The Medicare hospice benefit, a major source of funding for hospices, reinforces the traditional home-based model by limiting inpatient reimbursement to 20% of total annual patient days of enrollment. "Thus regardless of the type of sponsoring organization, most of the care is provided in the patient's home" (Hayslip & Leon, 1992, p. 31). This presents unique challenges for hospice staffs as they

work with various health care agencies to provide resources and care for patients in the patients' homes (the conditions of which vary widely from extreme poverty, hard to reach homes in rural areas, apartments in high crime areas, and expensive mansions). Hospice nurses working with patients in the patients' homes (a) represent the hospice organization for which they work; (b) serve, in part, as a staff person for the patient's physician; and (c) by hospice standards serve as advocate for the patient with the physician (Stoddard, 1991). When the patient is in a facility such as a hospital or nursing home, the nurse must also often take on the role of liaison between the hospital staff and patient. Hospice social workers and counselors also (a) represent the hospice organization for which they work, (b) serve as patient advocate with physicians and health care organization's serving the patient, and (c) serve as support and advocate for family members, and (d) serve as liaison between the patient and family and community resources (Rusnack, Schaefer, & Moxley, 1990). Thus, persons in each of these work roles must juggle several role expectations, which may often make conflicting demands on the hospice worker (i.e., physician demands may be in conflict with family and/or patient, or may be in conflict with hospice's focus on palliative rather than curative treatment modalities.)

Some researchers have found that difficulties in defining their roles as caregivers, (e.g., having too much responsibility without authority, not having one's responsibilities and expectations defined clearly), contributes to the high turnover

rate among hospice staff (Levy & Gordon, 1987; Masterson-Allen, Mor, & Laliberte, 1987). Other researchers insist that burnout is actually less of a problem in hospice (Price & Murphy, 1984; Turnipseed, 1987). Vachon (1986, 1987b) found that poor communication with other health care professions, role ambiguity and role conflict, impaired communication within the team, unrealistic expectations, and inadequate resources were all found to contribute to burnout among health care workers.

Chapter Summary

Research over the past 15 to 20 years has shown that high levels of job stress and subsequent burnout of the helping professional have major personal, organizational, and social costs (Foxall, Zimmerman, Standley, & Bene', 1990; Vachon, 1987b). Costs to American employers has been estimated at more than \$150 billion annually (Rosch & Pelletier, 1989). Lower productivity, absenteeism, high turnover of personnel, and internal conflicts are some of the problems employers experience when staff members are experiencing stress and burnout. This can add an additional cost to the employer of 25% of an employee's salary when the employee exhibits stress-related symptoms (Manuso, 1984; Wolfgang, 1988). The individual may experience depression, marital problems, job dissatisfaction, anxiety, and a range of diseases from headaches, ulcers, and skin disorders to coronary artery disease, immune system deficiencies, and some forms of cancer (Asterita, 1985).

The concept of burnout is an extension of stress research, specifically occupational stress research. A key concept in occupational stress research is that of Hans Selye's (1956) General Adaptation Syndrome (GAS). GAS describes the body's physiological response to stress through three stages: (a) alarm, (b) resistance, and (c) exhaustion. These three stages represent the stress response of the body which is comprised of over 1,400 physiochemical changes (Asterita, 1985). Chronic elicitation of the stress response has been linked to the development of illness and diseases which include major heart disease, asthma, diabetes, and migraine headaches.

While it is generally accepted that the stress response can have adverse affects on one's health, there is still no agreement on a definition of stress (Firth-Cozens & Hardy, 1992; Neufeld, 1989). A common definition of stress is that it is a stimulus and any stimuli which a person perceives as a threat (or strain) may be termed a stressor. Under such a definition, a stressor may be physical, psychological, or psychosocial in nature. A second commonly used definition is that stress is a response. This definition emphasizes a 'state of stress' which can be identified by physiological and psychological responses to situations. This approach is used most often in biology and medicine.

Building on the previous two definitions of stress, a third definition which has been receiving increased attention over the past decade is that stress is a stimulus-response relationship (Antonovsky, 1979; Pollock, 1989). This definition emphasizes the

relationship between the person and his or her environment. Stress for the individual is viewed as a result of the interaction between his or her appraisal and coping strategies and the environment. This approach parallels modern medicine's concept of illness in which illness is no longer seen simply as the result of external organisms. It is now understood that a pathogen must be united with an organism vulnerable to that pathogen. Such an understanding of stress takes into consideration the person-environment relationship and the characteristics of that relationship which may make one vulnerable to the development of stress.

The Person-Environment Fit theory used in occupational development and occupational stress research is concerned with how characteristics of the environment and the person affect well-being. The fit between a person and her or his environment is distinguished in one of two ways: (a) need-supplies fit which approaches fit from the perspective of the employee through such means as pay, fringe benefits, opportunities for recognition, etc.; and (b) abilities-demands fit which defines fit according to the employer's needs of skills and characteristics from the employee. Person-Environment Fit theory acknowledges that fit may be viewed from either the employer's perspective or from the employee's perspective; it may be viewed objectively as well as subjectively. Chatman (1989) suggested that when studying subjective stressors, to choose those which have similarity in meaning at the individual and organizational levels.

An important characteristic of the Person-Environment relationship is the appraisal processes used by the individual. Through appraisal-focused coping an individual seeks to define the meaning of a situation, it may be (a) irrelevant; (b) benign-positive; or (c) stressful in that it is a challenge, threat, or loss (Dewe, 1991; Lazarus & Folkman, 1984). If a situation is determined by the individual to be stressful, then the next process of appraisal evaluates which coping options are available, the potential the various options have to meet the coping need, and the likelihood that one can apply a particular option effectively. This interactional model of appraisal and coping is phenomenological, meaning that it rests on the individual's subjective interpretation of a transaction (Dewe, 1991; Lazarus & Folkman, 1984).

Burnout has been identified as an internal psychological experience affecting feelings, attitudes, and expectations in a negative way. The three components of burnout about which most researchers agree are (a) exhaustion which is experienced by the individual as a loss of energy, physiologically and psychologically, with a loss of trust and a growing experience of apathy; (b) the individual develops a disparaging response to others, with depersonalization of others (clients, coworkers, family), and a loss of ideals; and (c) one develops lowered self-esteem, depression, lowered productivity, and vulnerability to chronic stress illnesses. Such an effect obviously influences one's ability to effectively use appraisal-focused coping.

Research has shown that persons who are in the helping professions, people who work with people, are the most likely to experience some level of burnout (Daily, 1990; Evans & Fischer, 1993; Golembiewski et al., 1986; Vachon, 1987b). Several variables have consistently been identified as key stressors for human services personnel: (a) role ambiguity and conflict, (b) communication problems, and (c) personality and communication problems related to "problem" patients or families (Daily, 1990, Simendinger & Moore, 1985). In a study of nurses and social workers, Vachon (1987a) found that three out of four top stressors cited by helping professionals were role ambiguity, role conflict, and role overload.

Meta-analysis studies on stress by Fisher and Gitelson (1983) and Jackson and Schuler (1985) suggest that the impact of role conflict and role ambiguity on job related attitudes and behaviors is pervasive. Studies on role conflict and role ambiguity indicate that they correspond to absence, poor job performance, depression, and other indicators of chronic stress. Role conflict was found in Vachon's study (1987b) to be the major stressor for nurses, and the second greatest stressor for social workers. Both groups in her study frequently found themselves in a variety of role conflict situations indicating that the frequency of role conflict situations generated as much if not more stress than the intensity of the situations.

Research into health care organizations has pointed to nurses and social workers as those caregivers who are

consistently vulnerable to work related role stressors (Levy & Gordon, 1987; Masterson-Allen, Mor, & Laliberte, 1987; Oktay, 1992; Vachon, 1987b). There has been little overall research done specifically on caregivers in hospices. When hospices have been included in broader research on healthcare professionals, nurses and social workers have demonstrated problems with role ambiguity and role conflict. Hospices have been shown to have a high rate of turnover in these professional areas. Further, the characteristics of the work environment, where social workers and nurses must juggle their role among the many different parties involved in a patient's care and well-being, may contribute to role conflict, role ambiguity and to burnout. Such an interaction is characteristic of a needs-supply misfit in the Person-Environment Fit theory. Research points to the need to specifically study hospice nurses and social workers with regards to burnout.

CHAPTER III METHODOLOGY

Chapter Organization

In this chapter the research questions, study design, research instruments, study hypotheses, subjects, research procedures, data collection and analysis, and limitations of the study are described. The purpose of this study was to ascertain through the use of the Role Questionnaire (Rizzo, House, & Lirtzman, 1970) and the Maslach Burnout Inventory (Maslach, 1986) if role ambiguity and role conflict have any predictive properties for burnout among hospice nurses and social workers. Further, analysis was used to determine differences in any such predictive properties between the nurses and social workers. Age, gender, race, and work years were analyzed to determine if there was a significant product-moment covariation between them and role ambiguity, role conflict and work role.

Research Questions

1. Can role ambiguity and role conflict, as measured by the Role Questionnaire, predict burnout, as measured by the three Maslach Burnout Inventory subscales, among social workers and nurses working in hospice settings?

2. Do role conflict and role ambiguity in combination with type of work (social worker or nurse) predict burnout in hospice workers?
3. Do role conflict and role ambiguity in combination with type of work (social worker or nurse), race, gender, age, and work experience predict burnout in hospice workers?

Research Design

The Person-Environment Fit theory was developed by French, Rogers, and Cobb (1974) based on the programmatic view that work behavior and attitude are functions of characteristics of the person and the environment. Two types of fit are distinguished in the theory, each measured in terms of commensurate properties of the person and environment: (a) needs-supplies fit and (b) abilities-demands fit. The theory allows a distinction between objective and subjective components of fit. Different points of view can influence whether Person-Environment Fit is defined as needs-supplies misfit or demands-abilities misfit (Vancouver & Schmitt, 1991). Fit may be viewed from either the employee's or employer's perspective.

One area of fit that may be measured is that of role ambiguity and role conflict. To adequately perform his or her role, a person must know "(a) what the expectation of the role set are (e.g., rights, duties, and responsibilities); (b) what activities will fulfill the role responsibilities (mean-ends knowledge); and (c) what the consequences of role performance are to self, others, and the organization" (Sawyer, 1992, p. 130). From the

perspective of Person-Environment Fit theory, role ambiguity and role conflict are evaluated from the employee's perspective and is therefore a needs-supply view of fit. Burnout may be viewed as an employee's subjective view of his or her current abilities-demands fit.

Subjects

Subjects for this study were nurses and social workers (this term includes all who reported themselves as social workers or counselors) employed by hospices. Criteria for inclusion into the survey population included current employment by a hospice which was a member of the National Hospice Organization and which was licensed by its respective state. Nurses included in this study were RNs (registered nurses) and LPNs (licensed practical nurses) as certified and licensed by their respective states. Social workers were those trained as counselors or social workers who were working for their respective hospice in the role of medical social worker, bereavement counselor, counselor, or social worker. Data were not available that might have individually identified nurses and social workers working for hospices. Thus, subjects were contacted through their employing hospices. In 1994 there were 1,900 hospice organization members of the NHO, with 969 licensed by their respective states. Hospices were chosen for the study using a probability proportionate to size (PPS) random sample.

Research Instrumentation

The research instrument for this study was comprised of three components: (a) a demographic information sheet, (b) a

self-report measure of burnout, and (c) a self-report assessment of role conflict and role ambiguity. The Maslach Burnout Inventory (MBI) was used to measure the three subscales associated with burnout. The Rizzo, House, and Lirtzman scales (the Role Questionnaire), was used to assess levels of role conflict and role ambiguity.

The Maslach Burnout Inventory

Maslach (1982a) defined burnout as "a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind. It is a response to the chronic emotional strain of dealing extensively with other human beings, particularly when they are troubled or having problems" (Maslach, 1982a, p. 3). The MBI is based on this concept of burnout as a syndrome, a progressive response that occurs over time as a direct result of a helping or client relationship. The subscales of the MBI reflect the conceptualization that burnout is a continuous variable, ranging from low to moderate to high degrees of experienced feeling.

Developed from research into chronic stress experienced by staff members in human services and educational institutions (Maslach, 1976; 1982a, 1982b; Maslach & Jackson, 1982, 1986), the MBI assesses the different aspects of burnout. The MBI is designed to assess three aspects of the burnout syndrome: (a) emotional exhaustion, (b) depersonalization, and (c) a sense of lack

of personal accomplishment. Each aspect is measured by a separate subscale.

Feelings of being emotionally overwhelmed or overextended and exhausted by one's work are measured by the Emotional Exhaustion subscale. The Depersonalization subscale measures "an unfeeling and impersonal response towards recipients of one's service, care, treatment, or instruction" (Maslach & Jackson, 1986, p. 3). Feelings of competence and successful achievement in one's work with people is measured by the Personal Accomplishment subscale. Burnout is not viewed as a dichotomous variable, which is either present or absent, but rather it is conceptualized as a continuous variable, ranging from low to moderate to high degrees of experienced feeling. Scores on the MBI are considered high if they are in the upper third of the normative distribution, average if they are in the middle third, and low if they are in the lower third. Appendix G gives the numerical cut-off points for the three subscales of the MBI. Scores for each subscale are considered separately and are not combined into a single, total score. Thus, three scores, one for each subscale, are computed for each respondent.

The MBI is a 22-item self-report questionnaire. Items are written in the form of statements about personal feelings or attitudes (e.g., "I feel very energetic"). The original MBI had two response dimensions: (a) frequency and (b) intensity. Correlation between the frequency and intensity dimension across individual items ranged from .35 to .73, with a mean of .56. "These results

suggested that while there is a moderate relationship between how often one experiences various feelings and how intensely they are felt, this relationship was far from perfect" (Maslach & Jackson, 1986, p. 8). The current edition of the MBI assesses only the frequency dimension with response possibilities ranging from 0 = never to 6 = every day. Item content was developed over eight years of research. Occupations represented in that developmental research were those where the worker must deal directly with people about issues that either are, or could be, problematic. Data were subjected to a factor analysis using principal factoring with iteration and an orthogonal (varimax) rotation. "Ten factors accounted for over three-fourths of the variance" (Maslach & Jackson, 1986, p. 7). Items were retained that met all of the following criteria: (a) a factor loading greater than .40 on only one of the factors; (b) a large range of subject responses; (c) a relatively low percentage of subjects checking the "never" response; and (d) a high item-total correlation (Maslach & Jackson, 1986).

Reliability coefficients for the subscales of the MBI were the following: .90 for Emotional Exhaustion; .79 for Depersonalization; and .71 for Personal Accomplishment. The standard error of measurement for each subscale is as follows: 3.80 for Emotional Exhaustion; 3.16 for Depersonalization; and 3.73 for Personal Accomplishment. Since people have widely varying beliefs about burnout, the test for the MBI is labeled "Human Services Survey" to minimize the reactive effect of personal beliefs or expectations.

The Role Questionnaire

The Role Questionnaire was developed by Rizzo, House, and Lirtzman (1970) to measure role stress. It is a self-report instrument which has 14 statements which the subject rates using a 7-point Likert scale. Responses range from 1 = very false to 7 = very true. The role ambiguity subscale is comprised of the first six items, with lower scores indicating that the subject is experiencing more role ambiguity. The role conflict subscale is formed from the remaining eight items, with higher scores suggesting a high degree of perceived role conflict.

The Role Questionnaire was developed from an initial questionnaire of 30 items. Using factor analysis, two factors were extracted which accounted for fifty-six percent of the variance of the 30-item set. The items were loaded onto these two factors. Factor I was named role conflict because it primarily reflected items drawn from the role conflict definition. Of the 15 role conflict items, 9 were found with loadings greater than or equal to .30. Three items loaded primarily on factor II, role ambiguity, 2 items loaded in the expected direction (role conflict) but with low magnitudes. Factor II was named role ambiguity because it reflected items drawn from the definition for role ambiguity. Of the 15 role ambiguity items, 9 loaded with .30 or greater. Factor I accounted for 32 percent of the common variance, and Factor II accounted for 26.3 percent of the common variance. For the purposes of developing scales, items were selected using several criteria (a) only items loading greater than or equal to .30 were

considered, (b) complex items--those with relatively high loading on both factors--were excluded in order to achieve greater independence of scores, and (c) items were then subjected to reliability analysis. The questionnaire was reduced to its current length of 14 questions. Reliability measures reported by Netemeyer, Johnston, and Burton's (1990) study of the instrument were .782 for role conflict and .831 for role ambiguity. These findings were similar to those of House, Schuler, and Levanoni (1983). The study further examined the effects of the role conflict and role ambiguity variables with job satisfaction. It is interesting to note that the authors concluded that "role conflict and role ambiguity may influence different types of jobs in unique ways" (Netemeyer, Johnson, & Burton, 1990, p. 156).

One question which has been raised by some researchers is whether role conflict and role ambiguity scales measure unique distinguishable constructs, or, as suggested by Tracy and Johnson (1981), are the items in both measures simply different indicators of one general construct (e.g., role stress, role confusion, or role discomfort)? Kelloway and Barling (1990) used a confirmatory factor analysis of the role conflict and role ambiguity scales to address this question. The results of their study offer little support for either of the hypotheses suggesting that Rizzo's et al. (1970) role conflict and ambiguity scales suffer from a lack of construct validity. "Specifically, little support emerged for a general role-stress dimension reflected in a single-factor model" (Kelloway & Barling, 1990, p. 740). They concluded in their study

that sufficient support exists for the construct validity of the role conflict and role ambiguity scales as developed by Rizzo, House, and Lirtzman (1970).

Self-Report Measures

Self-report techniques are based upon the principle which proposes an individual's perspective on reality is central to understanding his or her understanding of any given experience. Anastasi (1986) emphasized that the individual is viewed as the best source for information about her or his world view and perceptions about her or his experiences and beliefs. Merluzzi and Boltwood (1989) recommend the following to limit a respondent's tendencies to draw causal inferences that may affect responses:

1. Probing for data should be kept to a minimum.
2. Measurers should be selected which provide pertinent retrieval cues easily recognized and understood by the survey population's field of experience.

Research Hypotheses

For the purposes of this study, the following hypotheses are stated:

H₀₁: Role ambiguity and role conflict, as measured by the Role Questionnaire, are not significantly related to Emotional Exhaustion, as measured by the Maslach Burnout Inventory.

Ho₂: Role ambiguity and role conflict, as measured by the Role Questionnaire, are not significantly related to Depersonalization, as measured by the Maslach Burnout Inventory.

Ho₃: Role ambiguity and role conflict, as measured by the Role Questionnaire, are not significantly related to Personal Accomplishment, as measured by the Maslach Burnout Inventory.

Ho₄: Work role (nurses versus social workers) does not significantly influence Emotional Exhaustion, as measured by the Maslach Burnout Inventory, after controlling for role conflict and role ambiguity as measured by the Role Questionnaire.

Ho₅: Work role (nurses versus social workers) does not significantly influence Depersonalization, as measured by the Maslach Burnout Inventory, after controlling for role conflict and role ambiguity as measured by the Role Questionnaire.

Ho₆: Work role (nurses versus social workers) does not significantly influence Personal Accomplishment, as measured by the Maslach Burnout Inventory, after controlling for role conflict and role ambiguity as measured by the Role Questionnaire.

Ho₇: Work role (nurses versus social workers), race, age, gender, and work experience do not significantly influence Emotional Exhaustion, as measured by the Maslach Burnout Inventory, after controlling for role conflict and role ambiguity as measured by the Role Questionnaire.

Ho₈: Work role (nurses versus social workers), race, age, gender, and work experience do not significantly influence

Depersonalization, as measured by the Maslach Burnout Inventory, after controlling for role conflict and role ambiguity as measured by the Role Questionnaire.

Hog; Work role (nurses versus social workers), race, age, gender, and work experience do not significantly influence Personal Accomplishment, as measured by the Maslach Burnout Inventory, after controlling for role conflict and role ambiguity as measured by the Role Questionnaire.

Research Procedures

Using the nine population regions in the United States, as divided by the U. S. Bureau of the Census, hospices were chosen from each region according to probability proportionate to size sampling procedures. The goal of the study was to sample five percent of the 969 (48) licensed hospices which were also members of the National Hospice Organization. Because the study design required that the selected hospices be contacted by phone to receive permission to mail the surveys, there existed the possibility that hospice directors might not give permission for their hospice to participate. In order to insure the study was a random selection in the event of refusal to participate by a hospice, 10 percent of the licensed hospices were selected with the first five percent to say yes included in the study. Ninety six hospices were chosen by a probability proportionate to size (PPS) sampling: ten percent of the licensed hospices listed in the 1994-1995 National Hospice Organization's Guide to the Nation's Hospices in each of the nine regions were selected systematically

using a random beginning point in each region and then selecting every 20th hospice until 10 percent of that region's licensed hospices had been selected. The PPS is a method of stratified cluster sampling used "whenever the clusters sampled are of greatly differing sizes" (Babbie, 1989, p. 196). A review of the licensed hospices by region showed that the number in each region varied greatly from 320 hospices to 9 hospices. The PPS is a design that gives each hospice in each cluster (region) an equal chance of selection proportionate to its size, thus, it produces a final sample in which each element had the same chance of selection (Babbie, 1989).

Program directors or their equivalent in the hospices chosen at random were contacted by phone. The study was explained as "stress research on hospice nurses and social workers." Permission was requested to send survey packets to the director for distribution to their nurses and social workers. No hospice contacted declined participation, so the first five percent selected were included in the study.

Each hospice representative was asked during the phone call to give (a) the number of nurses and social workers working for that hospice, (b) the name of the contact person to distribute the survey packets to the nurses and social workers and a request for distribution within one week of receipt, and (c) agreement of that person to distribute a reminder sheet to the social workers and nurses two weeks from receipt of surveys. The reminder sheets were included in the original mailing to the contact person, along

with a cover letter (Appendix A) outlining distribution procedures, and the responsibilities to which the contact person had agreed. At the conclusion of the study, participating hospices received a copy of the study results along with a thank you letter.

Each survey packet distributed to the social workers and nurses included (a) a letter to participants (Appendix C) requesting their participation and an explanation of participants' anonymity in the study and procedures for completing and returning the surveys; (b) a demographic information sheet (Appendix D); (c) the Maslach Burnout Inventory (the Human Services Survey, Appendix E); and (d) the Rizzo, House, and Lirtzman's scales (the Role Questionnaire, Appendix F). The above sheets were stapled together, along with an addressed, stamped return envelope which had a color code marked on it to distinguish returns by region. The demographic information sought was work role (nurse or social worker/counselor), age, gender, race/ethnicity, years at present job, total years worked in hospice.

Data Collection and Analysis

Survey packets were sent to five percent (48) of the state licensed hospices that were members of the National Hospice Organization with a total of 400 packets mailed for distribution. Phone calls were made to the randomly selected hospices the first week of December, 1994. All survey packets were mailed the selected hospices by December 10, 1994. A historical event occurred a few days following the last mail-out when the United States Postal Service announced that January 1, 1995 first class

postage would rise. This meant any returns mailed after January 1 would not have sufficient postage on the pre-stamped return envelopes included in the study. It was decided to not attempt to correct the postage on the 400 envelopes already sent. By December 31, 1994, 213 returns (90% of the total returns) had been received. January 15, 1995 was used as a cut-off date for inclusion in the study. An additional 24 returns (10% of total returns) had been received once the postage went up between January 1 and January 15. Two hundred and thirty seven responses were received, three of which were incomplete. The sample size, then, was 234 (a 59% return rate).

The analyses of the data was accomplished using a General Linear Model (GLM). Frequency distribution tables were established for all variables. Analyses of variance (ANOVAs) were prepared for each subscale of the Maslach Burnout Inventory and role conflict and role ambiguity. Stepwise regression models were used for each subscale (dependent variable) of the Maslach Burnout Inventory and role conflict, role ambiguity and work role. The study's hypotheses were tested for strength of associations on the predictor (independent) variables and age, gender, race, work years, and work role.

Limitations of the Study

The study was designed to study role ambiguity and role conflict as potential predictors of burnout among hospice social workers and nurses. Since there was no means to survey these professionals by direct mailing, contact was made through

administrative personnel in participating hospices. There was no way to know what bias or influence such a path of contact may have had on the study subjects. The direct return of the surveys to the investigator and the controls to insure subjects' anonymity were designed to minimize problems with initial administration.

Limitations are inherent in the utilization of a self-report methodology such as was used in this study. Instruments well known and widely used for measuring the variables for this study were chosen due to their appropriate reliability estimates and validity coefficients. The instruments further provided appropriate face validity in order to avoid subjects trying to second guess what was really being studied.

Another limitation of the study may have come from subjects reluctance to self-disclose on topics related to their job satisfaction and therefore in some way become vulnerable at work. Through the agreement with the contact person at each hospice, the cover letter, the ability to seal and self-mail the surveys, and the fact that no individual identification was possible through the surveys, it was hoped that subjects trusted the anonymity of their responses.

Chapter Summary

The purpose of this study was to investigate whether role ambiguity and role conflict have any predictive properties for burnout in hospice social workers and hospice nurses. The study used the Role Questionnaire developed by Rizzo, House, and Lirtzman (1970) and the Maslach Burnout Inventory (1981) to

analyze whether perceived role ambiguity and role conflict predict burnout among hospice social workers and nurses. Research has shown both instruments chosen for this study to be appropriate measures for role ambiguity and role conflict, and for the three subscales of burnout. The research design for this study involved contact with randomly selected hospices in order to receive permission to mail questionnaire to their respective social workers and nurses. Hospices were selected using the probability proportionate to size method of random selection. Data analyses for this study were conducted using a general linear model and using regression matrix tables. Limitations of the study which were identified include the need to contact and acquire the assistance of administrative personnel from each participating hospice, self-report instrument limitations, and answer bias related to a sense of vulnerability about work.

CHAPTER IV

RESULTS

The subjects involved in this study were 162 (69%) nurses and 72 (31%) social workers. Of these subjects, 220 (92%) were female and 14 (8%) male. Of the 234 respondents, 220 (94%) were White (not of Latin origin), 5 (2%) were Native American, 5 (2%) were African American, 1 (less than 1%) was Hispanic, and 3 (1%) indicated other (one of whom noted she was Jewish).

The highest degree of schooling for 178 (76%) of the respondents was high school and a two year professional degree (ADN), while 56 (24%) of the respondents had received a masters degree. Those respondents who were licensed in their respective work role was 209 (89%); those not licensed were 25 (11%). Table 1 shows the regions of the United States used for the cluster sampling and their respective response percentages. The confidence level for gender, race/ethnic background, schooling, region, and licensure was 95% with a sampling error of + or - 5.914%.

Demographic information for age and years of experience in hospice work and years in present position was calculated at a 95% confidence level. Subjects were asked how long they had worked in their current position and how long they had worked in any hospice program. The responses to these two questions were

Table 1

Regions Used for Cluster Sampling and Their
Response Percentages

Region	Percent of Total Hospices () Total Surveys Sent		Total Received	Percent
Mountain	004.50	(017)	010	004.27
East North Central	024.50	(096)	044	018.80
South Atlantic	026.00	(104)	069	029.49
Mid Atlantic	006.00	(024)	013	005.56
West North Central	002.50	(011)	005	002.14
New England	009.50	(039)	027	011.54
Pacific	005.00	(020)	016	006.84
East South Central	004.50	(018)	006	002.56
West South Central	017.50	(071)	044	018.80
Total	100.00		234	100.00

essentially identical with less than 1% difference between the two. Subjects who had worked in their current position for two years or less accounted for 59% of the subjects; those who had worked three years to seven accounted for 35%. Thus, 94% of the subjects had worked in a hospice setting and at their current position seven years or less, with only 6% having had longer experience. The mean years worked in their current position was 2.93 years with a sampling error of + or - .3797. Subjects' ages ranged from 22 years to 69 years. The mean age of subjects was 43.19 years with a sampling error of + or - 1.115. Table 2 shows the percentages for each decade of age for the subjects.

Table 2

Subjects' Ages by Decade and Percent of Total Respondents

Age:	20s	30s	40s	50s	60s
Percent:	6.82	28.63	38.89	19.64	6.02

Dependent variable data were drawn from the Maslach Burnout Inventory (MBI). The MBI yielded scores for three subscales (a) Depersonalization, (b) Emotional Exhaustion, and (c) Personal Accomplishment (reversed). Independent variable data were drawn from the Role Questionnaire. The Role Questionnaire yielded two scores (a) role conflict and (b) role ambiguity. Additional independent variable data were drawn from work role (nurse or social worker), and from the demographic data of age, race or ethnic background, work years, and gender.

The Statistical Analysis System (SAS) was used to compute analyses of variance (ANOVAs) and correlation analyses for the dependent and independent variables. The level of significance for all analyses was set at $p = .05$. This chapter includes the results of the data analyses for testing the 9 hypotheses.

Tables 3 through 5 provide the bivariate relationships and significance between role ambiguity and role conflict for the three subscales of the MBI. Table 3 provides the Pearson product moment correlation coefficients, test of determination, and the significance test (t-test) between role ambiguity and the subscale Emotional Exhaustion and between role conflict and Emotional Exhaustion. Scoring for this subscale is based on three ranges of

scores: (a) low burnout is 0-16, (b) moderate burnout is 17-26, and (c) high burnout is 27 or over. Table 3 shows the bivariate relationships between role conflict and Emotional Exhaustion and between role ambiguity and Emotional Exhaustion are both significant. Role Conflict accounted for the larger percentage of variance, 14.3%, in Emotional Exhaustion. Role ambiguity accounted for 10% of the variance. Role conflict and role ambiguity influenced Emotional Exhaustion in opposite directions. Hypothesis 1 was rejected.

Table 3

Bivariate Relationship and Significance Between the Maslach Burnout Inventory Subscale on Emotional Exhaustion with Role Conflict and Role Ambiguity

	R	R ²	t
Role Conflict	-0.378 **	0.143 **	-6.222 **
Role Ambiguity	+0.316 **	0.100 **	+5.066 **

* p < .05 ** p < .01 N=234

Table 4 provides the Pearson product moment correlation coefficients, test of determination, and the significance test (t-test) between role ambiguity and Depersonalization and between role conflict and Depersonalization. Scoring for this subscale is based on three ranges of scores: (a) low burnout is 0-6, (b) moderate burnout is 7-12, and (c) high burnout is 13 or over. Table 4 shows the bivariate relationship between role conflict and Depersonalization and between role ambiguity and

Table 4

Bivariate Relationship and Significance Between the Maslach Burnout Inventory Subscale on Depersonalization with Role Conflict and Role Ambiguity

	R	R ²	t
Role Ambiguity	+0.317 **	0.101 **	+5.096 **
Role Conflict	-0.259 **	0.067 **	-4.082 **

* p < .05 ** p < .01 N=234

Depersonalization is significant. Role ambiguity accounted for the larger percentage of variance, 10%, in Depersonalization. Role conflict accounted for 6.7% of the variance. Role ambiguity and role conflict influenced Depersonalization in opposite directions.

Hypothesis 2 was rejected.

Table 5 provides the Pearson product moment correlation coefficients, test of determination, and the significance test (t-test) between role ambiguity and Personal Accomplishment and between role conflict and Personal Accomplishment. Scoring for this subscale is based on three ranges of scores: (a) low burnout is 39 or over, (b) moderate burnout is 32-38, and (c) high burnout is 0-31. Table 5 shows the bivariate relationship between role conflict and Personal Accomplishment and between role ambiguity and Personal Accomplishment is significant. Role conflict accounted for the larger percentage of variance, 10.5%, in Personal Accomplishment. Role ambiguity accounted for 3.7% of the

Table 5

Bivariate Relationship and Significance Between the Maslach Burnout Inventory Subscale on Personal Accomplishment with Role Conflict and Role Ambiguity

	R	R2	t
Role Conflict	+0.324 **	0.105 **	+5.211 **
Role Ambiguity	+0.192 **	0.037 **	-2.980 **

* p < .05 ** p < .01 N=234

variance. Role conflict and role ambiguity influenced Personal Accomplishment in opposite directions. Hypothesis 3 was rejected.

Tables 6 through 11 provide the bivariate correlations and the stepwise regression data for each MBI subscale with role conflict, role ambiguity and work role. Table 6 shows the bivariate correlations between the subscale on Emotional Exhaustion with

Table 6

Bivariate Correlations Between the Maslach Burnout Inventory Subscale on Emotional Exhaustion (EE) with Role Conflict, Role Ambiguity and Work Role

	Burnout EE	Role Conflict	Role Ambiguity	Work Role
Role Conflict	-0.378 **	---	---	---
Role Ambiguity	+0.316 **	-0.522 **	---	---
Work Role	+0.009	+0.070	-0.046	---

* p < .05 ** p < .01 N = 234

role conflict, role ambiguity and work role. There were significant relationships between role conflict and Emotional Exhaustion, and between role ambiguity and Emotional Exhaustion, but no significant relationship between work role and Emotional Exhaustion. Role conflict and role ambiguity influenced Emotional Exhaustion in opposite directions (a) as role conflict went up, Emotional Exhaustion went down; and (b) as role ambiguity went up, Emotional Exhaustion went up.

Table 7 shows the stepwise regression data for role conflict, role ambiguity and work role on the Maslach Burnout subscale on Emotional Exhaustion. Role conflict significantly accounted for 14% of the variance in Emotional Exhaustion. Role ambiguity significantly added an additional 1.9% of the variance after variance due to role conflict was controlled. Work role accounted for .02%, an insignificant amount, of the variance after variance due

Table 7

Stepwise Regression for Role Conflict, Role Ambiguity and Work Role on the Maslach Burnout Inventory Subscale on Emotional Exhaustion

Independent Variables	Multiple R	Multiple R ²	Change in R ²	Slope (b)	t Value
Role Conflict	0.378 **	0.143 **	0.143 **	-0.418	-4.176 **
Role Ambiguity	0.402 **	0.162 **	0.019 *	0.147	+2.305 *
Work Role	0.405 **	0.164 **	0.002	0.708	+0.613

F-Ratio = 14.993 ** Regression Y-Intercept = 30.866 N = 234

* p < .05 ** p < .01

to role conflict and variance due to role ambiguity were controlled. Thus, Hypothesis 4 regarding the significant contribution of work role was not rejected.

Table 8 provides the bivariate correlations between the subscale on Depersonalization with role conflict, role ambiguity, and work role. There were significant relationships between role conflict and Depersonalization, and between role ambiguity and Depersonalization, and no significant relationship between work role and Depersonalization. Role conflict and role ambiguity influenced Depersonalization in opposite directions (a) as role conflict went up, Depersonalization went down; and (b) as role ambiguity went up, Depersonalization went up.

Table 8

Bivariate Correlations Between the Maslach Burnout Inventory Subscale on Depersonalization (DP) with Role Conflict, Role Ambiguity, and Work Role

	Burnout DP	Role Ambiguity	Role Conflict	Work Role
Role Ambiguity	0.317 **	---	---	---
Role Conflict	-0.259 **	-0.522 **	---	---
Work Role	-0.095	-0.046	0.070	---

* $p < .05$ ** $p < .01$ N = 234

Table 9 shows the stepwise regression data for role conflict, role ambiguity and work role on the Maslach Burnout subscale on Depersonalization. Role ambiguity significantly accounted for 10.2%

of the variance in Depersonalization. Role conflict significantly added an additional 1.1% of the variance after variance due to role ambiguity was controlled. Work role accounted for .05%, an insignificant amount, of the variance after variance due to role conflict and variance due to role ambiguity were controlled. Thus, Hypothesis 5 regarding the significant contribution of work role was not rejected.

Table 9

Stepwise Regression for Role Conflict, Role Ambiguity and Work Role on the Maslach Burnout Inventory Subscale on Depersonalization

Independent Variables	Multiple R	Multiple R ²	Change in R ²	Slope (b)	t Value
Role Ambiguity	0.319 **	0.102 **	0.102 **	0.067	3.437 **
Role Conflict	0.336 **	0.113 **	0.011 *	-0.052	-1.696 *
Work Role	0.344 **	0.118 **	0.005	-0.426	-1.210
F-Ratio = 10.281 ** Regression Y-Intercept = 37.102 N = 234					
* p < .05 ** p < .01					

Table 10 provides the bivariate correlations between the subscale on Personal Accomplishment with role conflict, role ambiguity, and work role. There was a significant relationship between role conflict and Personal Accomplishment, no significant relationship between role ambiguity and Personal Accomplishment, and no significant relationship between work role and Personal Accomplishment. Role conflict and role ambiguity influenced

Table 10

Bivariate Correlations Between the Maslach Burnout Inventory Subscale on Personal Accomplishment (PA) with Role Conflict, Role Ambiguity, and Work Role

	Burnout PA	Role Conflict	Work Role	Role Ambiguity
Role Conflict	0.324 **	---	---	---
Work Role	0.089	0.070	---	---
Role Ambiguity	-0.192	-0.522	-0.046	---

* $p < .05$ ** $p < .01$ N = 234

Personal Accomplishment in opposite directions (a) as role conflict went up, Personal Accomplishment went up; and (b) as role ambiguity went up, Personal Accomplishment went down. Table 11 shows the stepwise regression data for role conflict, role ambiguity and work role on the Maslach Burnout subscale on

Table 11

Stepwise Regression for Role Conflict, Role Ambiguity and Work Role on the Maslach Burnout Inventory Subscale on Personal Accomplishment

Independent Variables	Multiple R	Multiple R ²	Change in R ²	Slope (b)	t Value
Role Conflict	0.324 **	0.105 **	0.105 **	0.265	4.147 **
Work Role	0.330 **	0.109 **	0.004	0.783	1.059*
Role Ambiguity	0.332 **	0.110 **	0.001	-0.017	-0.423

F-Ratio = 19.461 ** Regression Y-Intercept = 31.488 N = 234*
 $p < .05$ ** $p < .01$

Personal Accomplishment. Role conflict significantly accounted for 10.5% of the variance in Personal Accomplishment. Work role added an additional .04%, an insignificant amount, of the variance after variance due to role conflict was controlled. Role ambiguity accounted for .01%, an insignificant amount, of the variance after variance due to role conflict and variance due to work role were controlled. Thus, Hypothesis 6 regarding the significant contribution of work role was not rejected.

Table 12 shows the bivariate correlations between the subscale on Emotional Exhaustion with role conflict, role ambiguity, work years, race, gender, work role, and age. There was a significant relationship (inverse) between role conflict and Emotional Exhaustion; between role ambiguity and Emotional Exhaustion, between work years (inverse) and Emotional Exhaustion; no significant relationship between gender and Emotional Exhaustion; between work role and Emotional Exhaustion; and between age and Emotional Exhaustion.

Table 13 provides data on the stepwise regression for role ambiguity, role conflict, age, work years, race, gender, work role and the subscale of Emotional Exhaustion. Role conflict significantly accounted for 14.3% of the variance in Emotional Exhaustion. Role ambiguity added a significant amount of 1.9% of the variance after variance due to role conflict was controlled. Work years added 1.3%, an insignificant amount, to the variance after variance due to role conflict, and variance due to role ambiguity were controlled. Race, gender, work role, and age each added less than 1%, an

Table 12

Bivariate Correlations Between the Maslach Burnout Inventory Subscale on Emotional Exhaustion (EE) with Role Conflict, Role Ambiguity, Work Years, Race, Gender, Work Role and Age

	Burnout EE	Role Conflict	Role Ambiguity	Work Years	Race	Gender	Work Role	Age
Role Conflict	-0.378 **	--	--	--	--	--	--	--
Role Ambiguity	0.316 **	-0.522 **	--	--	--	--	--	--
Work Years	-0.132 *	0.091	0.038 --	--	--	--	--	--
Race	-0.136 *	0.192	-0.101	-0.091	--	--	--	--
Gender	-0.005	0.071	-0.001	-0.109 *	0.012	--	--	--
Work Role	-0.009	0.070	-0.046	-0.069	0.027	0.261 **	--	--
Age	-0.050	0.010	-0.062	0.224 **	0.152 *	-0.092	0.085	--

* $p < .05$ ** $p < .01$ N = 234

Table 13

Stepwise Regression for Role Conflict, Role Ambiguity and Work Role on the Maslach Burnout Inventory Subscale on Emotional Exhaustion

Independent Variables	Multiple R	Multiple R ²	Change in R ²	Slope (b)	t Value
Role Conflict	0.378**	0.143**	0.143**	-0.379	-3.692**
Role Ambiguity	0.403**	0.162**	0.019*	0.155	+2.413*
Work Years	0.418**	0.175**	0.013	-0.350	-1.869
Race	0.425**	0.181**	0.006	-3.095	-1.340
Gender	0.428**	0.183**	0.002	-1.880	-0.802
Work Role	0.429**	0.184**	0.001	-0.872	+0.724
Age	0.430**	0.185**	0.001	-0.029	-0.505

F-Ratio = 7.320 ** Regression Y-Intercept = 36.30 N = 234*
 p < .05 ** p < .01

insignificant amount, after variance due to role conflict and variance due to role ambiguity were controlled. Thus, Hypothesis 7, regarding the significant contribution of work years, race, gender, work role, and age was not rejected.

Table 14 shows the bivariate correlations between the subscale on Depersonalization with role conflict, role ambiguity, work years, race, gender, work role, and age. There was a significant relationship (inverse) between role conflict and Depersonalization; between role ambiguity and Depersonalization, between age (inverse) and Depersonalization; no significant relationship between gender and Depersonalization, between work role and Depersonalization, and between age and

Table 14

Bivariate Correlations Between the Maslach Burnout Inventory Subscale on
Depersonalization (DP) with Role Conflict, Role Ambiguity, Work Years, Race, Gender,
Work Role and Age

	Burnout DP	Role Ambiguity	Role Conflict	Age	Race	Work Years	Work Role	Gender
Role Ambiguity	0.317 **	--	--	--	--	--	--	--
Role Conflict	-0.259 **	0.522 **	--	--	--	--	--	--
Age	-0.130 *	-0.062	0.010	--	--	--	--	--
Race	0.055	-0.101	0.192 **	-0.152 *	--	--	--	--
Work Years	0.060	0.038	0.091	0.224 **	-0.069	--	--	--
Work Role	-0.095	-0.046	0.070	0.085	0.027	-0.069	--	--
Gender	-0.014	-0.001	-0.071	-0.092	-0.012	-0.109 *	0.261 **	--

* $p < .05$ ** $p < .01$ $N = 234$

Depersonalization. Table 15 provides data on the stepwise regression for role ambiguity, role conflict, age, work years, race, gender, work role and Depersonalization. Role conflict significantly accounted for 14.3% of the variance in Depersonalization. Role ambiguity added an additional significant amount of 1.9% of the variance after variance due to role conflict was controlled. Work years added 1.3%, an insignificant amount, to the variance after variance due to role conflict, and variance due to role ambiguity were controlled. Race, gender, work role, and age each added less than 1%, an insignificant amount. Hypotheses 8 was not rejected.

Table 15

Stepwise Regression for Role Conflict, Role Ambiguity and Work Role on the Maslach Burnout Inventory Subscale on Depersonalization

Independent Variables	Multiple R	Multiple R ²	Change in R ²	Slope (b)	t Value
Role Ambiguity	0.318**	0.101**	0.101**	0.229	3.142**
Role Conflict	0.336**	0.113**	0.013*	-0.163	-2.197*
Age	0.355**	0.126**	0.013	-0.117	-1.805
Race	0.366**	0.134**	0.009	0.102	1.599
Work Years	0.378**	0.143**	0.009	0.096	1.493
Work Role	0.383**	0.147**	0.004	-0.319	-0.872
Gender	0.384**	0.147**	0.000	-0.136	-0.191
F-Ratio = 5.559 ** Regression Y-Intercept = 7.91 N = 234					

* $p < .05$ ** $p < .01$

Table 16 shows the bivariate correlations between the subscale on Personal Accomplishment with role conflict, role

Table 16

Bivariate Correlations Between the Maslach Burnout Inventory Subscale on Personal Accomplishment (PA) with Role Conflict, Role Ambiguity, Work Years, Race, Gender, Work Role and Age

	Burnout PA	Role Conflict	Work Years	Work Role	Gender	Role Ambiguity	Race	Age
Role Conflict	0.324 **	---	---	---	---	---	---	---
Work Years	0.124 *	0.091	---	---	---	---	---	---
Work Role	0.089 *	0.070	-0.069	---	---	---	---	---
Gender	-0.076	-0.071	-0.109 *	-0.261 **	---	---	---	---
Role Ambiguity	-0.192 **	-0.522 **	0.038	-0.046	-0.001	---	---	---
Race	0.046	0.192 **	-0.091	0.027	0.012	-0.101	---	---
Age	0.040	0.010	0.224 **	0.085	-0.092	-0.062	-0.152 *	---

* $p < .05$ ** $p < .01$ $N = 234$

ambiguity, work years, race, gender, work role, and age. There was a significant relationship between role conflict and Personal Accomplishment; between role ambiguity (inverse) and Personal Accomplishment; between work years and Personal Accomplishment; between work role and Personal Accomplishment; and no significant relationship between gender, race, or age and Personal Accomplishment.

Table 17 provides data on the stepwise regression for role ambiguity, role conflict, age, work years, race, gender, work role and Personal Accomplishment. Role conflict significantly accounted

Table 17

Stepwise Regression for Role Conflict, Role Ambiguity and Work Role on the Maslach Burnout Inventory Subscale on Personal Accomplishment

Independent Variables	Multiple R	Multiple R ²	Change in R ²	Slope (b)	t Value
Role Conflict	0.324**	0.105**	0.105**	+0.246	+3.722**
Work Years	0.338**	0.114**	0.009	+ 0.183	+1.517
Work Role	0.345**	0.119**	0.005	+1.096	+1.414
Gender	0.351**	0.123**	0.004	-1.615	-1.071
Role Ambiguity	0.353**	0.125**	0.002	-0.026	-0.625
Race	0.353**	0.125**	0.000	-0.136	-0.092
Age	0.354**	0.125**	0.000	-0.002	-0.043
F-Ratio = 4.612 ** Regression Y-Intercept = 33.29 N = 234					
* p < .05 ** p < .01					

for 10.5% of the variance in Personal Accomplishment. Race, work years, role ambiguity, gender, work role, and age each added less than 1%, an insignificant amount. Hypotheses 9 was not rejected.

In summary, Hypotheses 1, 2, 3, were rejected. Hypotheses 4, 5, 6, 7, 8, and 9 were not rejected.

CHAPTER V DISCUSSION

Purpose Overview

The purpose of this study was to analyze whether perceived role ambiguity and role conflict are useful as predictors of burnout among hospice nurses and hospice social workers. Vachon (1987b) studied intensive care and palliative care nurses and social workers and noted "It seemed clear that [staff] felt that more of their stressors emerged from their work environment and from their occupational role than from their direct work with dying patients and their families" (p. 51). Role ambiguity and role conflict have been identified in many studies as important work environment factors in job stress and burnout, particularly among health care workers (Firth & Britton, 1989; Vachon, 1987b).

The Person-Environment Fit theory was used as the framework for this study. This theory proposes that the fit between an employee and an organization may be understood and studied from both (a) the employee's perspective and (b) the organization's (employer's) perspective. The fit is concerned with how characteristics of the environment and the person fit together and affect well-being of both the organization and the person. Chatman (1989) suggested that when studying subjective stressors, to choose those which have similarity in meaning at the

individual and organizational levels. Role ambiguity and role conflict are subjective stressors which have been found to have such similarity in meaning (Vancouver & Schmitt, 1991). The purpose of this chapter is to discuss the results of the statistical analyses and to present implications and suggestions for further research.

Discussion

Social workers and nurses working for hospices surveyed in this study were asked to respond to a demographic data sheet, the Maslach Burnout Inventory and the Role Questionnaire (the Rizzo, House, and Lirtzman scales of role ambiguity and role conflict). The information from the demographic data sheet allowed a rough outline to be drawn regarding the subjects. The ratio of nurses to social workers was 2:1 or 69% to 31%. The respondents' ages ranged from 22 to 69 years (the mean age was 43) with 87% of respondents being between the ages of 30 and 60 years. The racial/ethnic background for the subjects was (a) predominately White (94%), (b) with those of Native American and African American backgrounds accounting for 2% each, and (c) those of Hispanic backgrounds accounting for less than 1% (1% of the respondents marked the Other category).

It is interesting to note that when asked (a) how long they had worked in any hospice program and (b) how long they had worked at their current position, the respondents gave essentially the same answer to the two questions (with less than 1% difference between the two questions). The mean years worked

was only 3 years. Subjects who had worked in their current position and who worked in any hospice for 2 years or less accounted for 59% of the subjects. Ninety four percent of the subjects had worked in their current position 7 years or less. This may indicate that (a) hospice workers tend not to move from hospice to hospice; (b) there is a high turnover rate among hospice staff as indicated in previous research (Levy & Gordon, 1987; Masterson-Allen, Mor, & Laliberte, 1987); or (c) nationally, hospices are still relatively young organizations and in the start-up phases of hiring and developing staff and, thus, staff has not had a chance or need to move around. It was not possible from data gathered for this study to indicate which factors were involved.

The mean age of hospice workers was 43 years, with the majority (87%) being in their middle years (30s, 40s, 50s). Just over 59% of the respondents were in their 40s and 50s. When one looks at the mean age of the respondents, and compares that information with their mean years worked, one possibility is that hospices across the nation are functioning with staff who are relatively new to the field of hospice work, but who are not new to the work force.

Dependent variable data were derived from the three subscale scores of the Maslach Burnout Inventory (MBI) (a) Emotional Exhaustion, (b) Depersonalization, and (c) Personal Accomplishment. The MBI is based on the concept that burnout is a progressive response to chronic stress that occurs over time

ranging from low to moderate to high degrees of experienced feeling (Maslach, 1976). The Emotional Exhaustion subscale measures one's sense or feelings of being emotionally overwhelmed or overextended by one's work. The Depersonalization subscale measures one's impersonal (or unfeeling) response towards the recipients of one's service, treatment, or care. Feelings of competence and successful achievement in one's work with people is measured by the Personal Accomplishment subscale (Maslach & Jackson, 1986).

The mean scores for both work role groups was the same (rounded to nearest whole number) for both the Emotional Exhaustion and the Depersonalization subscales. There was only a 2 point difference between work role groups on the Personal Accomplishment subscale. Both nurses and social workers scored in the moderate range of burnout for Emotional Exhaustion and Depersonalization, and in the low range of burnout for the Personal Accomplishment subscale (meaning they had a high sense of accomplishment). The results of this study indicate that there is little or no difference in the level of experienced burnout between the work roles of hospice nurses and hospice social workers. The most potent of the contributors to burnout, Emotional Exhaustion (Golembiewski & Munzenrider, 1988), was in the moderate range for both work role groups. Thus hospice nurses and social workers appeared to feel somewhat overwhelmed or overextended. Golembiewski and Munzenrider (1988) have noted that Depersonalization is the least potent

contributor to burnout. Further, they have found that certain levels of Depersonalization (low to moderate) to be a helpful coping approach for many professionals who work with other people's problems and tragedies. Because the most potent contributor to burnout, Emotional Exhaustion, was the subscale which reached the highest mean level for this study, hospice personnel and administrators should monitor staff for intense and/or chronic experiences of feeling emotionally drained and the potential for burnout.

Independent variable data were derived from the role conflict scale and the role ambiguity scale of the Role Questionnaire, and from data derived from demographic questions. Researchers in the past have shown that no occupational role stressor nor work environment contributes the majority of the explained variance in stress and burnout (Golembiewski & Munzenrider, 1988; Jayaratne, Himle, & Chess, 1991; Vachon, 1987b). They have shown that it is the combination of five to seven occupational role stressors before variance is explained at a 50% level or above. Thus, occupational stress is a complex interaction of factors which contribute to a worker's burnout. Understanding each factor or set of factors is important in addressing burnout. Vachon (1987b) found that out of seven occupational stressors, role ambiguity and role conflict contributed the largest portion to explained variance (role conflict 20% and role ambiguity 19% vs. 12% and 10% for the next closest magnitudes reported).

On the MBI subscale on Emotional Exhaustion, significant interactions were found between role conflict and role ambiguity. Although the interaction was found to be significant, the magnitude of the explained variance was small, 14% for role conflict with an addition of only 2% (rounded) for role ambiguity after variance due to role conflict was controlled. Work role had almost no relationship with Emotional Exhaustion as it added only .2% to the explained variance after variance due to other variables was controlled. What was interesting was the direction of the relationship. As role conflict went up, Emotional Exhaustion went down and as role ambiguity went up, Emotional Exhaustion went up.

Role conflict and role ambiguity influenced the variance in Emotional Exhaustion in opposite directions. Previous studies of role conflict and role ambiguity found that the relationship between the two tended to move in the same direction. Data gathered from this study were not sufficient to indicate a probable reason for the difference in direction between role conflict and role ambiguity. It may be important to note, however, that as role conflict went up, Personal Accomplishment went up and Emotional Exhaustion went down. The direction of both the Personal Accomplishment (up, indicating a greater sense of personal accomplishment) and Emotional Exhaustion (down, indicating less emotional exhaustion was being experienced) suggested that as role conflict rose, respondents experienced less burnout. Further study may be able to discover a plausible

reason for such a relationship between these variables. One area to research may be the respondent's interpretation of the conflict. As Lazarus and Folkman (1988) have reported, the nurses and social workers may re-interpret situations of conflict as challenge rather than threat. If they do so, it may 'energize' them rather than 'burn' them out.

When the variance in the MBI subscale of Depersonalization was analyzed, role conflict and role ambiguity influenced the variance in opposite ways. Role ambiguity accounted for the greatest amount of the variance (10.2%) with role conflict adding very little to the variance (1.1%) after variance due to role ambiguity was controlled. Work role added only .5% to the explained variance after variance due to the other variables was controlled, an insignificant amount. The magnitude of the overall interaction was small. Although role conflict had the larger impact on Emotional Exhaustion, it was role ambiguity that had the larger impact on Depersonalization.

Analysis of the interaction between the MBI subscale of Personal Accomplishment and role conflict, between role ambiguity and Personal Accomplishment, and between work role and Personal Accomplishment showed that role conflict accounted for majority of the variance (10.5%), role ambiguity accounted for the least amount of the variance (.1%), and work role accounted for .4%. The magnitude of the variance for role ambiguity and for work role was insignificant. It is interesting to note that role conflict explained most of the variance for both

Emotional Exhaustion and Personal Accomplishment.

Golembiewski and Munzenrider (1986) found that the subscales contribute to burnout at different levels of potency with Emotional Exhaustion having the greatest impact, then Personal Accomplishment, and Depersonalization having the least overall impact on experienced burnout.

Analysis of the three MBI subscales and the bivariate covariation among the independent variables of role conflict, role ambiguity, work years, race, gender, work role and age showed that only role conflict and role ambiguity contributed to the variance at a significant level. Because the wording of the demographic questions did not solicit total years in one's work role beyond hospice experience, it is not known if workers had longer general work role experience (i.e., nurse or social worker in another setting such as a hospital) than that reported in this study.

Implications

Burnout is a serious condition for both the individual and for the organization for which she or he works. The researcher in this study examined the use of role conflict and role ambiguity as potential predictors of burnout among hospice nurses and social workers. The magnitude of the variance in burnout explained by role conflict and role ambiguity was not large enough to indicate these variables are good predictors by themselves. They did contribute at a statistically significant level and, therefore, should not be ignored.

The question of why Emotional Exhaustion goes down as role conflict goes up is an important one for future research. Vachon (1987b) noted that burnout was experienced more intensely by those who were measured as having low self-esteem. Could it be that gearing up to cope with role conflict enhances one's sense of self-esteem and thereby buffers against emotional exhaustion? Or perhaps it is a question of re-interpreting the situation as challenge and not threat? Another question that can be raised is the source of the perceived conflict. Does conflict with outside forces such as facility personnel or physicians affect hospice workers differently than internal conflict within the organization? Such a difference in the source of conflict may affect the interpretation of the conflict and one's view of self in the conflict.

The analyses conducted in this study showed that although there is no significant difference in the experience of burnout between the two work roles of nurse and social worker, both groups did score at moderate levels of burnout on Emotional Exhaustion and Depersonalization. Sixty six percent (154) of the respondents scored in the moderate to high ranges of burnout on the Emotional Exhaustion subscale. Golembiewski and Munzenrider (1988) reported that Emotional Exhaustion, as the most potent contributor to burnout, should be considered as a concern for burnout in the moderate range and certainly in the high range of the subscale. The levels discovered in this study were high enough to indicate conditions of chronic stress and

potential burnout among a majority of the individuals who participated in the study.

Recommendations

Although the magnitude of explained variance in burnout among hospice nurses and social workers for role ambiguity and role conflict was not large, they did contribute at a statistically significant level. It does seem important, then, for hospices to include them for consideration in stress management or burnout intervention programs. Role ambiguity is the result of the discrepancy between perceptions of management (and/or recipients of care) demands and the worker's role expectations. Role conflict occurs when one receives, or perceives that he/she has received, inconsistent or incompatible demands placed upon him/her by (a) a supervisor, (b) a combination of superiors, or (c) the work demands are incompatible with the worker's values and ethics.

One of the first places to begin to address this discrepancy is in the writing of job descriptions and the presentation of the job description and work role expectations at the job interview and again during orientation. Further, as workers stay in positions longer, it seems appropriate that their job descriptions and organizational expectations be reviewed for clarity, changes and mutual understanding between worker and supervisor at regular and frequent (at least biannually) intervals. Hospices are required by certification standards to provide support for staff. Support is not defined in those standards in terms of

organizational behaviors (i.e., support groups vs. availability of counselors vs. workshops, etc.). Hospices might use a variety of methods to allow workers to discuss mutual understandings of their roles with peers and supervisors and to receive suggestions (brainstorming) on how to clarify one's role in confusing or ambiguous situations. Further, hospices might work with administration and staff to identify sources of role conflict. When possible, hospices might work with outside sources of potential role conflict such as physicians and facility personnel to help clarify goals, lines of communication and responsibility related specifically to potential role conflict for patient care staff. Support groups may also be useful to help hospice workers identify sources of role conflict for themselves and develop coping and problem-solving techniques to address role conflict. In short, such support, whatever form it would take, should be designed to increase personal coping. Further, such exercises should provide the organization feedback on the appropriateness of its' demands and expectations of its employees.

Research

The limited magnitude of explained variance in burnout by role conflict and role ambiguity for hospice nurses and social workers indicates that there are other variables to be studied as they relate specifically to hospice workers. Because the results indicated some differences in the magnitude of explained variance of the variable of role conflict and role ambiguity between the population of hospice workers studied and previous studies of

nurses and social workers, further research should be done to see if such a variation exists for other occupational stress variables.

It was unexpected that role ambiguity and role conflict would affect the dependent variables in opposite directions and that role conflict would relate negatively (as role conflict went up, to Emotional Exhaustion went down). Further research might focus on possible buffering (coping) mechanisms being used by hospice workers which might impact these variables. One such possibility for future research is the question of whether role conflict is seen as challenge rather than threat by hospice workers, or whether the source of the conflict has significant impact on its effect on hospice workers. It appears that as the health care industry continues to evolve and respond to market pressures for efficiency and cost-effective programs, more and more health care services will be provided in homes for the chronically ill and dying. It is important to understand the sources of stress and burnout for the work force providing those services in light of the high cost stress and burnout can cause.

Chapter Summary

A discussion was presented in this chapter of the results of the statistical analysis of the dependent variables (a) Emotional Exhaustion, (b) Depersonalization, (c) Personal Accomplishment and the independent variables of (a) role conflict, (b) role ambiguity, (c) age, (d) gender, (e) race, (f) work years, and (g) work role. Implications of the results were discussed, along with

recommendations for practice. Finally, suggestions were made for further research.

APPENDIX A
LETTER TO CONTACT PERSONS OF PARTICIPATING HOSPICES

December 5, 1994

Dr. Roberta Sims, Program Director
Hospice of the Sea
P.O. Box 12345
Borger, Texas 79007

Dear Dr. Sims,

Thank you for allowing your hospice nurses and social workers to participate in this study and for your assistance in distributing the survey materials to them. Your staff's participation is important to this study. As per our conversation of December 4, I have enclosed for distribution in your hospice the following:

- 1) survey packets to be distributed immediately to your nurses and social workers.
- 2) reminder sheets to be distributed one week from packet distribution

The packets contain three sheets of paper. Page 1 is a request for participation and explanation of procedures. Page 2 is an information sheet, page 3 (on the back of page 2) is the Role Questionnaire, page 4 is the Human Services Survey. An addressed, stamped envelope is included for participants to return all three sheets.

As we discussed, I will call you one week after you receive this package of materials to ask that the reminder sheets be distributed. To ensure anonymity of responses, at no time are your staff members asked to identify themselves. Further, they are asked to place their survey forms in the envelope included in their packet, seal the envelope, and mail. The total time to complete the survey is approximately 20 minutes. Once the study is completed, I will send you the results.

Again, thank you for your participation and help.

Sincerely,

Ina Boyd, Ed.S.

APPENDIX B
REMINDER TO PARTICIPANTS

Dear Hospice Professional,

Approximately one week ago you were given a survey packet which contained three surveys related to stress experienced by hospice professionals. If you have not completed and mailed these, please take time to do so.

Your participation in this research is very important. Thank you for your time and consideration in helping with this important national study.

Sincerely,

Ina Boyd, Ed.S.
Principal Investigator

APPENDIX C
LETTER TO PARTICIPANTS

December 5, 1994

Dear Hospice Professional,

Your hospice has been selected to be part of a national study on stress. This study will examine stress as it is experienced by social workers and nurses who work for hospices. Your participation in this study is very important and I ask that you take a few minutes now or sometime today to complete the enclosed surveys.

Three survey's are enclosed: (1) the Demographic Information Data Sheet, (2) the Role Questionnaire (printed on back of the Demographic Informaiton Data Sheet), and (3) the Human Services Survey. Please complete each using your first impression (don't try to think of a right or wrong answer, simply answer with the first response that comes to your mind). After you have completed all the surveys, please enclose them in the addressed, stamped envelope which is included with this packet, seal the envelope and mail.

At no time are you asked to identify yourself. Your responses will not be shared individually or by individual hospices with anyone and are therefore anonymous. At the conclusion of this study, results of the study will be mailed to your hospice.

Thank you for your help,

Ina Boyd, Ed.S.

Principal Investigator

APPENDIX D
DEMOGRAPHIC DATA SHEET

Your gender:

_____ (1) male _____ (2) female

Your age in years: _____

Please list your highest degree

Are you licensed? ____ yes ____ no; if yes, what license do you hold? _____

How long have you worked at your present position?

_____ (years & months)

What is the total number of years you have worked in hospice?

_____ (years & months)

What is your **primary** role:

_____ (1) social worker

_____ (2) counselor

_____ (3) nurse

What is your **primary** ethnic background?

_____ (1) Asian/Pacific Islander

_____ (2) African-American

_____ (3) Hispanic

_____ (4) Native American

_____ (5) White (Not of Latin Origin)

_____ (6) Other _____

APPENDIX E

HUMAN SERVICES SURVEY

HOW OFTEN:

0	1	2	3	4	5	6
Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

HOW OFTEN

0-6 Statements:

1. ____ I feel emotionally drained from my work.
2. ____ I feel used up at the end of the workday.
3. ____ I feel fatigued when I get up in the morning and have to face another day on the job.
4. ____ I can easily understand how my recipients feel about things.
5. ____ I feel I treat some recipients as if they were impersonal objects.
6. ____ Working with people all day is really a strain for me.
7. ____ I deal very effectively with the problems of my recipients.
8. ____ I feel burned out from my work.
9. ____ I feel I'm positively influencing other people's lives through my work.
10. ____ I've become more callous toward people since I took this job.
11. ____ I worry that this job is hardening me emotionally.
12. ____ I feel every energetic.
13. ____ I feel frustrated by my job.
14. ____ I feel I'm working too hard on my job.
15. ____ I don't really care what happens to some recipients.

16. ____ Working with people directly puts too much stress on me.
17. ____ I can easily create a relaxed atmosphere with my recipients.
18. ____ I feel exhilarated after working closely with my recipients.
19. ____ I have accomplished many worthwhile things in this job.
20. ____ I feel like I'm at the end of my rope.
21. ____ In work, I deal with emotional problems very calmly.
22. ____ I feel recipients blame me for some of their problems.

(administrative use only)

EE: _____ DP: _____ PA: _____

APPENDIX F

ROLE QUESTIONNAIRE

This questionnaire lists conditions about one's role at work. Read each statement carefully and decide the degree to which this condition exists for you. Use the following scale to indicate how true the statement agrees with your work experience:

- 1 = Very false
- 2 = Usually false
- 3 = Somewhat false
- 4 = Neutral
- 5 = Somewhat true
- 6 = Usually true
- 7 = Very true

1. ____ I feel secure about how much authority I have.
2. ____ Clear, planned goals and objectives exist for my job.
3. ____ I know that I have divided my time properly.
4. ____ I know what my responsibilities are.
5. ____ I know exactly what is expected of me.
6. ____ Explanation is clear of what has to be done.
7. ____ I have to do things that should be done differently.
8. ____ I receive an assignment without the people-power to complete it.
9. ____ I work with two or more groups who operate quite differently.
10. ____ I have to buck a rule or policy to carry out an assignment.
11. ____ I receive incompatible requests from two or more people.
12. ____ I do things that are apt to be accepted by one person and not accepted by others.
13. ____ I receive an assignment without adequate resources and materials to execute it.
14. ____ I work on unnecessary things.

APPENDIX G
CATEGORIZATION OF MBI SCORES¹

MBI Subscales	Range of Experienced Burnout		
	Low	Average	High
Overall Sample			
EE ²	≤ 16	17-26	≥ 27
DP	≤ 6	7-12	≥ 13
PA	≥ 39	38-32	≤ 31
Occupational subgroups			
Social Services			
EE	≤ 16	17-27	≥ 28
DP	≤ 5	6-10	≥ 11
PA	≥ 40	36-34	≤ 29
Medicine			
EE	≤ 18	14-20	≥ 21
DP	≤ 4	5- 7	≥ 8
PA	≥ 34	33-34	≤ 28

¹ Occupations represented in the normative samples include: 4163 teachers (elementary and secondary, grades K-12); 635 post-secondary educators (college, professional schools); 1538 social service workers (social workers, child protective service workers); 1104 medical workers (physicians, nurses); 730 mental health workers (psychologists, psychotherapists, counselors, mental hospital staff, psychiatrists); and 2897 others (legal aid employees, attorneys, police officers, probation officers, ministers, librarians, and agency administrators).

- ² (EE) Emotional Exhaustion
(DP) Depersonalization
(PA) Personal Accomplishment

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BIOGRAPHICAL SKETCH

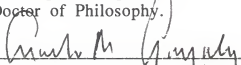
Ina Boyd was born on February 25, 1955 in Borger, Texas. She received an Associate of Arts degree from Frank Phillips Junior College in 1975. Her undergraduate education was completed at West Texas State University, where she was awarded a Bachelor of Business Administration degree in 1977.

Ms. Boyd received her Master of Divinity degree from Princeton Theological Seminary in Princeton, New Jersey in 1980. She received her Master of Theology degree from Union Theological Seminary in Richmond, Virginia in 1981; her area of study and research was pastoral counseling. She moved to Gainesville, Florida and was ordained into the Presbyterian Church (USA) and served for nine years as an associate pastor and educator. It was through her work with families and pastoral counseling that she decided to pursue further education and training as a mental health counselor.

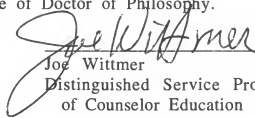
While continuing to work full time, in 1986 Ms. Boyd began course work at the University of Florida. She received the Master in Education and Education Specialist degrees in counselor education in 1989. Her major area of study was mental health counseling. In 1990 she joined the staff of the Hospice of North Central Florida as a chaplain. In 1993 she began serving as a Team Manager for Hospice.

Ms. Boyd is a Licensed Mental Health Counselor, a National Certified Counselor, a member of the American Counseling Association, and a member of the National Hospice Organization.

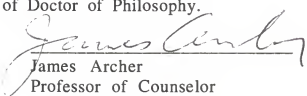
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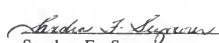
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